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CHARLES APELL'S

UP-TO-DATE CANDY TEACHER

BY

CHARLES APELL

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CHARLES APELL,

Author of Twentieth Century and the Up-to-Date Candy Teachers.

CHARLES APELL

Up-to-Date Candy Teacher

The most complete and up-to-date illustrated Candy Teacher that is out on the market, with complete instructions in the manufacture of all the different classes of candy made for the wholesale and retail trade.

Up-to-date illustrated methods for the manufacture of Stick and Ball Chewing Gum.

Up-to-date illustrated methods for the manufacture of Ice Cream and Soda Fountain Specialties by the use of refrigeration.

By CHARLES APELL

PRICE $10

Published by CHARLES APELL
BLOOMINGTON, ILL., U. S. A.

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CHARLES APELL

INTRODUCTION.

Knowing the demand there is today for a candy teacher that is practical, reliable and up to date in the manufacture of all the different kinds of candy, chewing gum, ice cream and fountain specialties, and after having spent 25 years working in wholesale and retail work, I am in position to furnish the confectioners with the very latest formulas and methods that are used in the manufacture of all the different kinds of candies sold to the wholesale and retail trade.

After selling my 20th Century Candy Teacher to most all the leading confectioners of the country, also England, Japan, Australia, Cuba, Canada, Mexico, British Columbia and Africa, I decided to get up a larger and more descriptive book on candy-making, ice cream making, chewing gum and soda fountain work, also showing all the very latest machines that are used in the manufacture of my up-to-date specialties on wholesale and retail work.

Wishing you one and all success in the art of candy-making, I sincerely offer this book, "Apell's Up-to-Date Candy Teacher."

Very respectfully,

CHARLES APELL.

574324

TO THE MANUFACTURING CONFECTIONER

To any wholesaler or retailer who aims to keep up with the up-to-date methods that are used in the manufacture of all the different starch specialties made for the wholesale and retail trade, he will find this book on candy making invaluable.

The starch that the confectioners use for casting the different specialties in, as cream goods, jelly and gum work, and marshmallow work, is the ordinary corn starch, and is sold to the confectionerss under the name of moulding starch, and can be purchased at any of the confectioners' supply houses or starch works.

Moulding starch, when purchased in barrels or sacks, should be taken from the barrels or sacks and placed in the starch trays, then placed in the drying room to dry for two or three days before using, as new starch will not hold the impression when you try to print with the moulds, as the new starch always causes the starch to drop in your impressions, which will cause an imperfect center.

Now, by adding some of the used starch that is thoroughly cleaned with some of the new starch that is thoroughly mixed together, you will find that your starch will hold the impression that is made with the moulds.

Starch that is used for cream work of any kind should be dry, but not warm, and the same for jelly work.

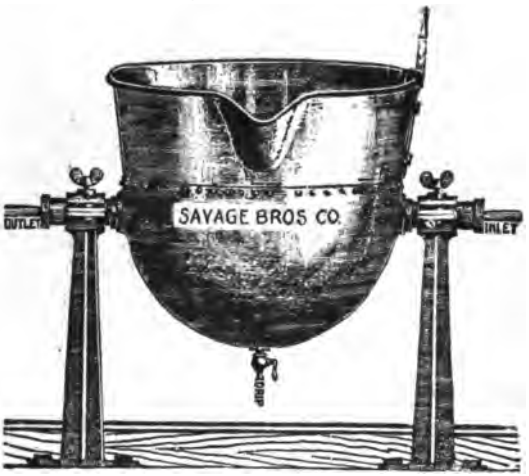
Starch that is to be used for gum work and marshmallow work, should be dry and warm, and should always be kept in the drying room up to the time you are ready to print your boards.

Starch that is used for cream work should not be used for gum or marshmallow work, on account of the fine siftings or tailings, as they are called, which come from the cream work when casting cream goods in starch, as I have always found by experience, by keeping the two different kinds of starch separated you will always get better results when making the different kinds of goods.

CREAM FONDANTS

When cooking cream fondants, if by the steam kettles or open fire kettles, always see that your kettle has a cover or steamer on after your batch comes to a boil, and keep your steamer or cover on your kettle until your batch shows no signs of sugar clinging to the sides of the kettle, because the least grain of sugar on the sides of your kettle will cause the batch to be grainy and not any good for making No. 1 chocolate cream centers.

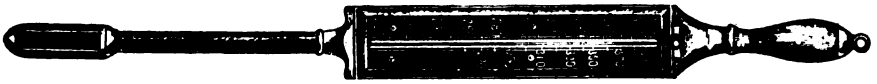
FONDANT CREAM FOR NO. 1 CHOCOLATES



Steam Cooking Kettle.

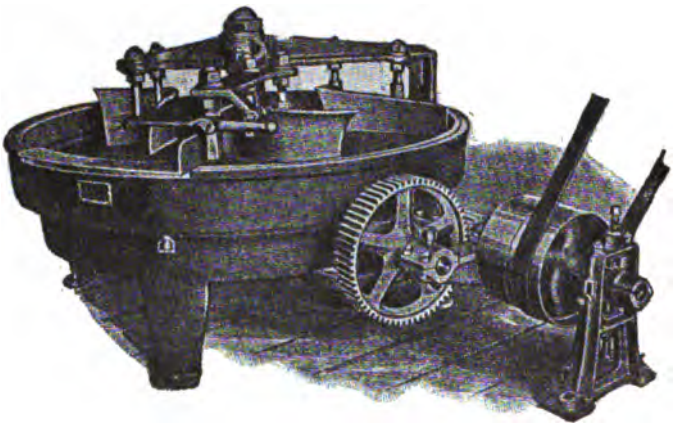
Place 100 lbs. of sugar in your cooking kettle, 4 gallons of water, 10 lbs. of corn syrup.

Cook to 236 degrees, then add 20 lbs. of corn syrup and cook your batch to 238 degrees in cooking gauge.



Improved Boiling Thermometer

When your batch of syrup is cooked to 238 degrees, in using the Dayton ball beater, you will have to pour the batch out in a copper kettle and then pour your batch on the ball beater. Always see that the cold water is turned on the cooling table when you start to cook your batch; that will give your cooling table on the machine time to get cold, and then sprinkle your cooling table on the machine with two cups of cold water before you pour the hot syrup on the machine.



Dayton Ball Cream Beater.
The Dayton Ball Cream Beater Co., Dayton, O.

Now then, when your batch is poured on the machine, and as soon as the bubbles stop, sprinkle the top of the syrup with two cups of cold water; that will keep the batch of syrup from having a sugar crust on top, otherwise your cream would be grainy when creamed. When your batch is cool enough so that when you make an impression in the syrup, the impression won't run together right away; then you are ready to start the machine to cream your fondant; and always turn off the cold water from the machine when you start to cream your fondant.

When your batch is creamed on the beater, take it off from the machine and put it in cream tubs, and always place a cover over your cream tubs to keep the cream from forming a hard crust on top of your fondant; then it is ready to be used in the manufacture of cream centers.

The colder you handle the cream on the beater while it is in a syrup, the smoother and softer your fondant cream will be. The hotter you handle the syrup on the beater, the dryer and grainier your fondant cream will be. There is such a thing as getting your cream too cold in the winter time, so that your machine won't be able to pull your batch. Your syrup must be only cool enough to hold the impression.

FONDANT CREAM FOR FRENCH CREAM MIXTURES

Cook by steam kettle, 100 lbs. of cane sugar, 10 lbs. of corn syrup, 4 gallons of water.

Cook to 240 degrees, then add 15 lbs. of corn syrup and cook to 241 degrees.

Then pour out on your ball machine and let cool. Cream fondants that are used for crystallized work should be creamed a little hotter than when used for chocolate cream centers.

FONDANT CREAM FOR CRYSTALLIZED BON BON DIPPING

Cook by steam kettle, 100 lbs. of cane sugar, 4 gallons of water, 10 lbs. of corn syrup.

Cook to 240 degrees, then add 10 lbs. of corn syrup and cook up to 241 degrees.

Fondant cream to be used for dipping should not be made up in stock, and should only be made up for the day's work, as the cream that is dipped during the day that cream will always show up whiter where the cream made up in stock will show up a shade darker after being dipped.

FONDANT CREAM FOR CRYSTALLIZED ICES OR JELLY CUTS

Cook by steam kettle, 100 lbs. of cane sugar, 4 gallons of water, 10 lbs. of corn syrup.

Cook to 240 degrees, then add 12 lbs of corn syrup and stir your corn syrup through your batch, then cook to 244 degrees. Pour out on your ball beater and as soon as the sugar forms a scum on top of your syrup start to cream your batch, as this syrup must be creamed warm, and as your batch will get hard and roll up in a lump on the beater, stop your beater then and break up the lump with your hands and use the machine also for breaking the setting. Then it is ready to be used.

This cream must be made into ices or jelly cuts while the cream is warm, and work your cream up into ices or jelly cuts while their is some heat in your cream, for if you should let your cream get cold your ices will be soft and hard to handle next morning.

FONDANT CREAM FOR GLAZE BON BONS OR GLAZE WORK

Cook by steam kettle, 50 lbs. of sugar (always use cane sugar for glaze work), 2 gallons of water, 2½ ounces of acetic acid No. 8.

Cook to 242 degrees. Pour on a cold beater that is sprinkled with 2 cups of cold water; and as soon as the syrup stops bubbling sprinkle the top of your batch with 2 cups of cold water and let your syrup cool until your syrup will hold an impression; then start to cream your batch, and as soon as your batch rolls up on the machine, stop the beater and take from the machine and place into your glaze cream tub, then it is ready to be used for cream wafers or glaze dipped bon bons.

Fondant cream for glaze work should never be cooked

up in large batches, as I have found out by experience that a 50-pound batch that size batch will give you the best results.

FONDANT CREAM TO BE USED FOR GRAINING FUDGE AND NOUGAT

Cook by steam kettle, 100 lbs. of beet sugar, 10 lbs. of corn syrup, 3½ gallons of water.

Cook to 240 degrees, then add 18 lbs. of corn syrup and cook your batch to 242 degrees.

Pour out on ball machine and do not let your syrup get too cold before you start to cream your batch to a fondant, as for fudge and nougat work you must have a short cream for graining your fudge and nougat work.

FONDANT CREAM FOR DIPPING CREAM CHERRIES FOR CHOCOLATE WORK

Cook by steam kettle, 50 lbs. of sugar, 2 gallons of water, 2 ounces of acetic acid No. 8.

Cook to 242 degrees, then add 3 lbs. of corn syrup and cook your batch to 242 degrees.

Pour out on beater to cool and when your syrup will hold an impression in the syrup start to cream your batch.

When cooling fondant cream that is made with acetic acid always see that your beater is cold before pouring out your syrup on the machine, and then always sprinkle the top of your syrup as soon as the syrup stops bubbling.

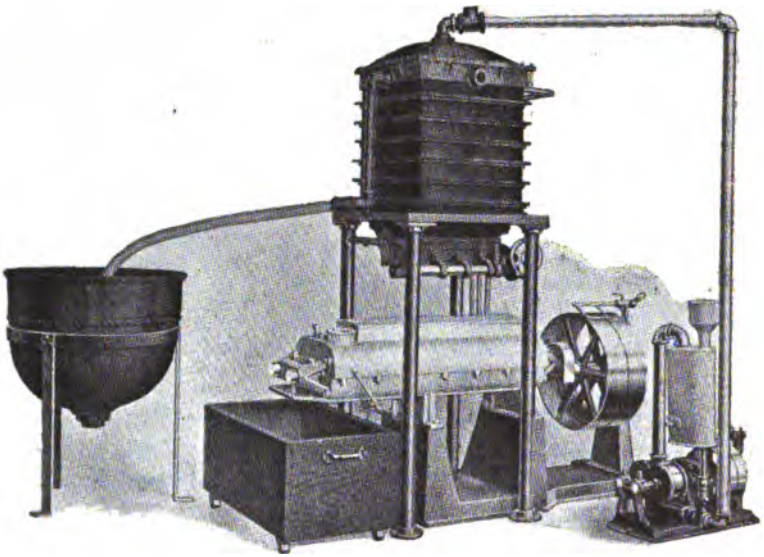
MAPLE FONDANT CREAM FOR NO. 1 CHOCOLATES

Cook by steam kettle, 100 lbs. of sugar, 25 lbs. of maple sugar, 5 gallons of water, 40 lbs. of corn syrup.

Cook to 238 degrees. Place your 25 lbs. of maple sugar

in your steam kettle with your 5 gallons of water and start your batch cooking until all of the maple sugar is thoroughly dissolved, then add your 100 lbs. of granulated sugar with 15 lbs. of corn syrup and cook to 238 degrees, then add 25 lbs. of corn syrup and let your batch cook up again to 238 degrees. Then pour out on your ball machine and finish like your other cream fondants.

FONDANT CREAM FOR SHORT CREAM CENTERS, OR CREAM MIXTURES OF ALL KINDS



John Werners & Sons, Syrup Cooler, Cream Beater with Vacuum Syphon and Pump

Cook by steam kettle, 300 lbs. of sugar, 25 lbs. of corn syrup, 10 gallons of water.

Cook to 240 degrees, then add 30 lbs. of corn syrup and mix thoroughly through your syrup, then let your batch boil up to 240 degrees in warm weather or 241 in hot weather.

Then start your pump going and pump your syrup into your cooler to cool and always see that your water is turned on the cooler when you start to cook your syrup, so that your receiver will be cold by the time your batch is cooked. Then leave your batch in your cooler or receiver just long enough to cool your syrup luke warm, for if you let your syrup get too cold in your cooler you will have to heat up your cooler by steam, which always has a tendency to cause a grainy syrup in your cooler.

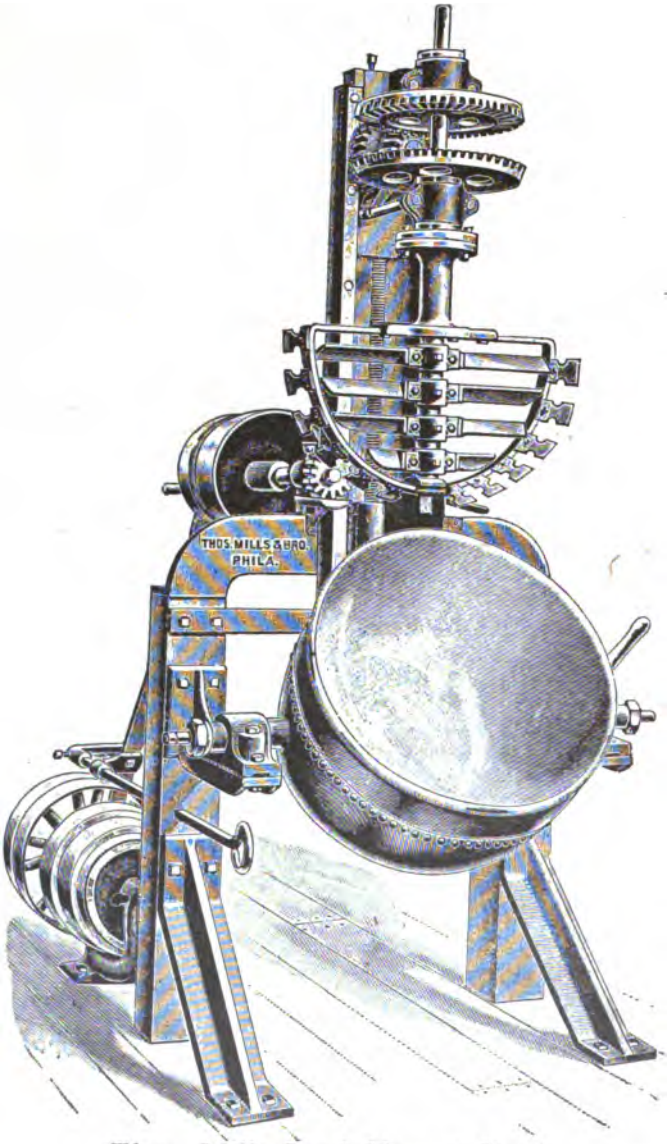
Now then, when your batch is cool enough to cream, the gate which is operated by a hand wheel on the side is opened slowly, which will let the cooled syrup flow into the beater by means of a funnel, which is not shown on the illustration, and the slower you feed the beater the whiter and richer you will be able to produce, for if you open the gate and let the syrup feed into the beater too fast, your cream will not turn out as smooth as by letting your beater thoroughly whip your syrup.

FONDANT CREAM FOR ENROBER DIPPED GOODS

Cook by steam kettle, 300 lbs. of sugar, 25 lbs of corn syrup, 9 gallons of water.

Cook to 238 degrees. Then add 75 lbs. of corn syrup and mix thoroughly through your syrup, and let your batch boil up to 238 degrees, then start your pump and pump your syrup in your cooler to cool, and for chocolate cream centers always let your syrup get just cool enough so that it will flow from your cooler; that will make your cream when it comes through the beater very smooth for making chocolate cream centers.

SPECIAL EGG FONDANT FOR CHOCOLATE CREAM CENTERS



Thos. Mills Bros' Nougat Kettle

MAPLE FONDANT CREAM FOR ENROBER CREAM CENTERS

Cook by steam kettle, 250 lbs. of granulated sugar, or southern sugar will do, 50 lbs of maple sugar, 11 gallons of water, 100 lbs. of corn syrup.

Cook to 238 degrees. Place your 50 lbs. of maple sugar in your steam kettle and your 11 gallons of water and start to cook your batch till your maple sugar is dissolved; then add your 250 lbs. of sugar and 25 lbs. of corn syrup and cook your batch to 238 degrees, then add the rest of the corn syrup, 75 lbs., and let boil up to 238 degrees, then finish like the other fondants.

WHAT SPECIAL EGG FONDANT WILL DO

Special egg fondant will make the chocolate cream centers stay soft.

Special fondant keeps the chocolate cream centers from leaking when made up for stock.

Special fondant makes the cream centers ripen up and makes the centers flow after being dipped in chocolate coating.

FORMULA FOR SPECIAL EGG FONDANT

Soak 1 lb. of egg albumen in 1 qt. of water in a glass jar over night. Always soak the egg albumen in a glass jar; if you use a tin container the egg albumen will change its color.

Place 10 lbs. of corn syrup in the beating machine with the dissolved egg albumen and beat this corn syrup and egg albumen up very light and stiff.

Then cook by steam kettle, or open fire, 20 lbs. of sugar, 10 lbs. of corn syrup, 3 qts. of water.

Cook to 242 degrees in cold weather or 244 degrees in

hot weather. Then pour this cooked syrup into the beaten egg batch and beat this batch up very stiff.

Then change the beater on slow speed and add 65 lbs of corn syrup and beat for 15 minutes; then add 1 oz. of bicarbonate of soda and mix thoroughly. Then it is ready to be used in the manufacture of chocolate cream centers.

This special fondant can be made up for stock, as it will keep, in barrels.

When using special fondant in chocolate cream centers use 40 to 50 lbs. to every 100 lbs of No. 1 fondant cream.

Never add the special fondant to the cream fondant until the cream fondant is heated hot enough to cast, then add the special fondant and mix thoroughly and only heat the batch so that the cream is thin enough to cast by machine or by 5-spout runner.

SPECIAL EGG FONDANT FOR NOUGAT WORK OR BAR GOODS

Soak 1 lb. of egg albumen in 1 qt. of water over night in a glass jar, or you can soak the egg albumen in the morning and place the jar of egg albumen in your dry room and it will be thoroughly dissolved by noon the same day; in this way you can use the egg albumen the same day that you put it to soak. Always place the water in the jar first, then add the egg albumen, and you will find the egg albumen will dissolve faster.

FORMULA FOR SPECIAL EGG FONDANT FOR NOUGAT WORK

Place 10 lbs. of corn syrup in the beating machine with the dissolved egg albumen and beat this corn syrup and egg up very light.

Then cook by steam kettle or open fire, 20 lbs. of sugar, 3 qts. of water, 5 lbs. of corn syrup.

Cook to 244 degrees for hot weather, or 242 for cold

weather. Then pour this cooked syrup into the beaten egg albumen and beat this batch up very stiff; then add 25 lbs. of corn syrup and mix thoroughly for 15 minutes on second speed; then add 1 oz. of bicarbonate of soda and mix through the batch. Then it is ready to be used for nougat work or bar goods.

When using special nougat fondant for bar goods use 40 lbs. of egg fondant to 100 lbs. of fondant cream for bar goods, casted in starch.

MOULD BOARDS WITH MOULDS FOR STARCH PRINTER

Racine Mould Board with Moulds

Mould boards and moulds are an absolute necessity in every manufacturing plant where starch work is done, such as cream work, gum work, jelly work and marshmallow work. Years ago it was customary to have candy makers to make the moulds and boards. While this is a common practice in the very smallest shops, the largest majority of the plants today are buying their mould boards and moulds from the house that makes a specialty of moulds and boards, as you will always get better results, and the moulds and boards are uniform in size.

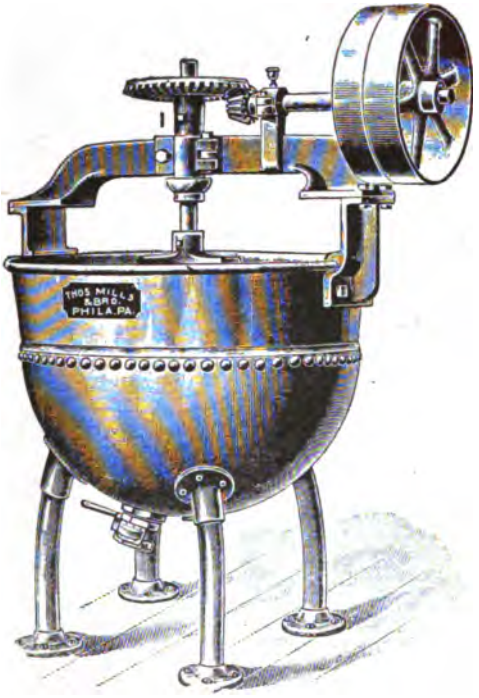
For those just starting in the business or putting in new equipment, this is a matter worthy of consideration, as the moulds and boards for your plant should be made by some one who is competent to do this class of work.

The Racine Machinery Co., of Racine, Wis., makes a specialty of mould boards and moulds of all kinds.

STARCH PRINTER

Racine Lightning Printer.

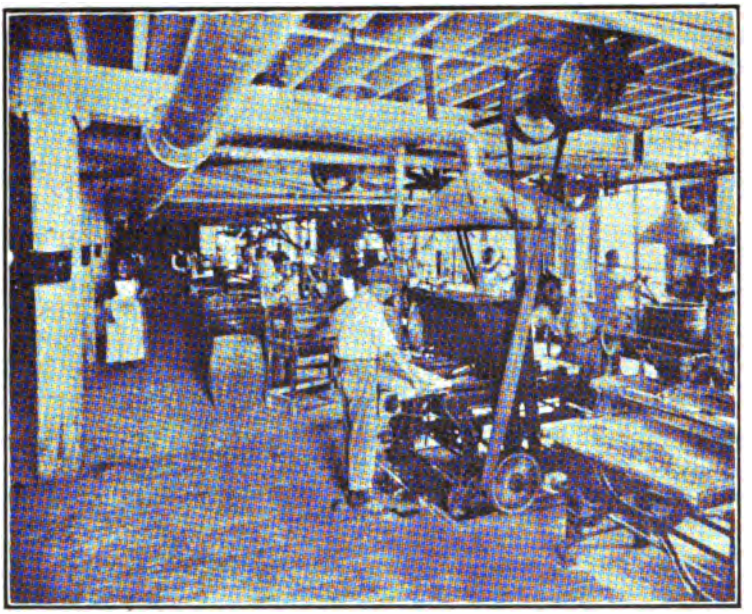
Every wholesale manufacturer who has a depositor for casting his starch work should have a starch printer. With this machine a boy can print the most difficult pattern successfully and at the same time do more work with the starch printer than the most experienced man can do by hand printing, as it not only causes a great saving in labor, but turns out the work faster than can be done by hand.



Cream Melting Kettle and Cooker

CHOCOLATE CREAM CENTERS FOR PACKAGE GOODS—VANILLA CREAM CENTERS

Melt in your melting kettle 100 lbs. of No. 1 cream fondant and turn on the steam slowly,, so that your cream fondant will melt without cooking your cream fondant around the sides of the melting kettle, and stir your cream with the stirrer until your cream is melted, and only heat your cream hot enough so that you can hold your finger in the syrup, or to 139 degrees by gauge. Then add 40 lbs. of special egg fondant and mix thoroughly through your batch, and just heat your batch hot enough so that your cream will cast good, then add 10 ozs. of good vanilla flavor. Then cast in starch by depositor machine.



Cream Department, showing ventilation system that is used by which the cream department is kept free from steam

CHOCOLATE CREAM CENTERS FOR PACKAGE GOODS—VANILLA CREAM CENTERS

Melt in your melting kettle 100 lbs. of No. 1 cream fondant and turn on the steam slowly, so that your cream fondant will melt without cooking your cream fondant around the sides of the melting kettle, and stir your cream with the stirrer until your cream is melted and only heat your cream hot enough so that you can hold your finger in the syrup, or to 130 degrees by gauge. Then add 40 lbs. of special egg fondant and mix thoroughly through your batch, and just heat your batch hot enough so that your cream will cast good, then add 10 ounces of good vanilla flavor; then cast in starch by depositor machine.

IN THE MANUFACTURE OF CHOCOLATE CREAM CENTERS

The most important part in the manufacture of chocolate cream centers is to make a smooth cream fondant, and to make a smooth fondant your syrup must not have the least bit of grain when the syrup is poured out on the cream beater, then the next important part is not to cream the syrup to a fondant until the syrup on the beater will hold an impression when made into it.

There are two methods used in the manufacture of cream centers. One method is for No. 1 hand dipped goods for package goods, and No. 2 method is for goods dipped on the enrober dipping machine, as pail goods and package goods.

In using No. 1 method, the fondant cream is remelted in a stirring kettle and then, when the cream is thin enough to cast, the special fondant is added, which is used to make the centers stay soft and ripen the center up after being dipped in chocolate.

In using the special fondant, 35 to 40 lbs. to 100 lbs. of cream fondant will produce a soft center, 50 lbs. will produce an extra soft center, and should not be added until the cream fondant is heated hot, so that it is thin enough to cast.

In using No. 2 method, the fondant cream is placed in the stirring kettle, then a syrup or "'bob," as it is called, is made and added to the fondant cream, then mix together; then the special fondant is added. The reason some houses use the syrup, or "bob," as it is called, is, that you do not have to use but half the amount of fondant cream, which is a little saving in labor; but what is gained in labor is lost in quality in producing a high grade hand dipped center. In making the cheap drops and pail goods I prefer the use of the syrup or "bob," as it makes the center firmer and shorter when a thin chocolate coating is used on the drop.

In using special fondant, with the syrup, or "bob," use

100 lbs. of No. 1 fondant cream; then cook a syrup, 80 lbs. of sugar, 20 lbs. of corn syrup, 3 gallons of water. Cook to 236 degrees, then add the syrup in the cream fondant and mix thoroughly; then add 50 lbs. of special fondant, then the flavor, and cast by depositor.

The Springfield Depositor for Casting Cream Centers.

This depositing machine deposits or drops the candy into the starch impressions and no wholesale house which is manufacturing for the wholesale trade should be without a depositor machine for casting the different cream centers. Its operation is certain and has a capacity of 8 trays per

minute, or 1920 drops, and every drop a uniform size. The pump bars, as they are called, can be changed in about 3 minutes, and the 20 pump bar will cast all ordinary cream centers that are used for box goods.

In operating the Springfield depositor, the trays are placed on the link belt, wnence they are automatically fed under the pump bar, and after being filled pass under the hopper and are removed at the opposite side.

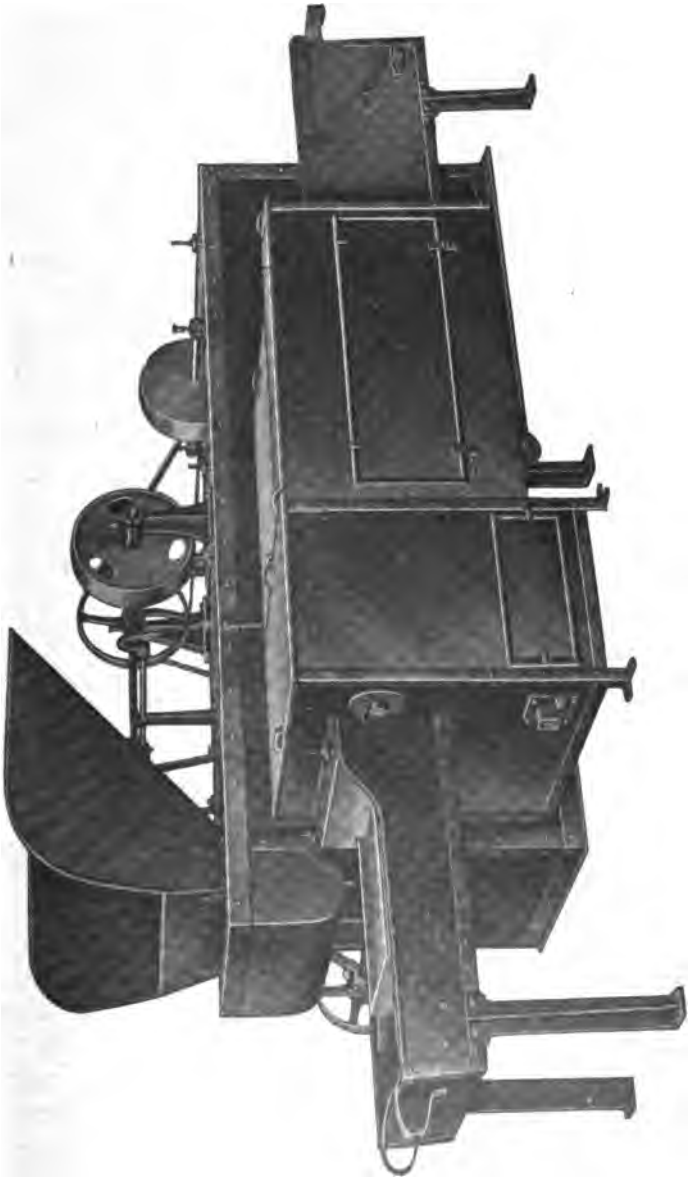
Your depositor should be kept clean and should be connected up with live steam, so that you can heat the hopper on the machine to 160 degrees if your cream is thick when poured in the hopper, or if your cream is thin, use only 140 degrees on your hopper.

Your depositor should be connected up with a steam hose, so that you can steam your pumps with live steam in case any sugar should get hard on the pumps, and always keep the wire strainer on your hopper so as to catch any small nails which come from your sugar barrels when they are opened.

In using the depositor machine for depositing centers you should have a memorandum chart hung up near the machine with the names of all the different kinds of center and the adjustments for the machine so that you will not have to spend any time in adjusting the size of center, and the same of movement of trays in skipping from one tray to another.

When your trays are filled from the depositor machine you-should have the automatic lifting truck in carting your trays away to some other part of the room away from the heat of the machine.

After your centers are casted in starch, let your centers stand in starch over night, then, next morning, take out by starch buck. As your centers will be very soft and in using the starch buck machine do not let the top brush down too far on the machine in brushing the cream centers.



The Springfield Simplex Starch Buck.

When running the starch trays through the starch buck to clean your centers from starch for soft chocolate cream centers raise the brush on your machine so that your brush won't press down on the centers too hard.

For cream mix and gum work lower your brush down, and if they are not thoroughly cleaned run your centers through again and they will come out thoroughly cleaned. Always see that your brushes are kept cleaned underneath, as they will fill up with starch and siftings when the machine is run all day long. In running the starch buck for wholesale work one boy should feed the machine, one to level off trays, and a girl to look after the centers as they come from the machine. For soft centers do not put many centers in a tray or they will go out of shape.

STRAWBERRY CREAM CENTERS FOR BOX GOODS

Melt 100 lbs. of No. 1 cream fondant in your melting kettle, then add 35 lbs. of special egg fondant and mix thoroughly through your cream fondant, then add half a gallon of crushed strawberry fruit that has been cooked down to a jam, then add 2 ounces of citric acid and color a very light pink.

CRUSHED FRUIT FOR NO. 1 CHOCOLATE CREAM CENTERS

Take 1 gallon of crushed strawberries, 4 lbs. of sugar and 2 lbs. of corn syrup; cook to a jam, then place in half-gallon jars, and it is ready to use for centers.

Take 1 gallon of crushed raspberries, 4 lbs. of sugar, with 2 lbs. of corn syrup; cook to a jam, then place in half-gallon jars and it is ready to use.

Take 1 gallon of canned pineapple, 4 lbs. of sugar, with

2 lbs. of corn syrup and cook to a jam, then place in glass jars ready for use.

Take 1 gallon of canned peaches and rub through a sieve, 4 lbs. of sugar and 2 lbs. of corn syrup and cook to a jam; then place in glass jars.

Take 1 dozen oranges and grind fine through a food chopper 4 lbs. of sugar with 2 lbs. of corn syrup and 1 quart of water and cook to a jam; then place in glass jars.

Take 1 dozen lemons and grind fine through a food chopper, 4 lbs. of sugar and 2 lbs. of corn syrup and 1 pint of water; cook to a jam and place in glass jars.

RASPBERRY CREAM CENTERS FOR BOX GOODS

Melt 100 lbs. of No. 1 cream fondant in melting kettle. Then add 35 lbs. of special egg fondant and mix thoroughly through your cream fondant. Then add half a gallon of crushed cooked raspberry fruit; then add 2 ounces of citric acid that is dissolved with 1 ounce of water. Then color a light red color.

PINEAPPLE CREAM CENTER FOR BOX GOODS

Melt 100 lbs. of No. 1 cream fondant in your melting kettle. Then add 35 lbs. of special egg fondant and mix thoroughly through your cream fondant; then add half a gallon of cooked pineapple fruit; then add 2 ounces of citric acid dissolved in 1 ounce of water.

PEACH CREAM CENTERS FOR CHOCOLATE BOX GOODS

Melt 100 lbs. of No. 1 cream fondant in your melting kettle. Then add 35 lbs. of special egg fondant and mix thoroughly through your cream fondant. Then add half a gallon of cooked peach fruit; then add 2 ounces of citric acid dissolved in 1 ounce of water.

ORANGE CREAM CENTERS FOR BOX GOODS

Melt 100 lbs. of No. 1. cream fondant in your melting kettle. Then add 35 lbs. of special egg fondant and mix thoroughly through your cream fondant; then add half a gallon of cooked orange fruit. Then add 2 ounces of citric acid in 1 ounce of water.

LEMON CREAM CENTERS FOR BOX GOODS

Melt 100 lbs. of cream fondant No. 1 in your melting kettle. Then add 35 lbs. of special egg fondant and mix thoroughly through your cream fondant.; then add half a gallon of cooked lemon fruit; then add 2 ounces of citric acid.

PEPPERMINT CREAM CENTERS FOR BOX GOODS

Melt 100 lbs. of No. 1 cream fondant in your melting kettle. Then add 35 lbs. of special egg fondant and mix thoroughly in your cream fondant and add 1 ounce of oil of peppermint.

CHOCOLATE CREAM CENTERS FOR BOX GOODS

Melt 100 lbs. of No. 1 cream fondant in your melting kettle. Then add 35 lbs. of special egg fondant in your cream fondant and mix thoroughly through your cream; then add 10 lbs. of liquor chocolate that has been melted, and mix thoroughly through your cream; then add 7 lbs. of corn syrup and mix thoroughly and add 4 ounces of vanilla flavor.

COCOANUT CREAM CENTERS FOR BOX GOODS

Melt 100 lbs. of No. 1 cream fondant in your melting kettle. Then add 40 lbs. of special egg fondant in your

cream fondant and mix thoroughly through your cream; then add 5 lbs. of macaroon cocoanut and mix thoroughly through your cream; then add 10 ounces of vanilla flavor.

WALNUT CREAM CENTERS FOR BOX GOODS

Melt 100 lbs. of No. 1 cream fondant in your melting kettle. Then add 40 lbs. of special egg fondant in your cream and mix thoroughly through your cream fondant; then add 5 lbs. of walnuts that have been ground very fine through a food chopper; then add 8 ounces of vanilla flavor and one-half ounce of salt.

MAPLE PECAN CREAM CENTERS FOR BOX GOODS

Melt 100 lbs. of Maple No. 1 cream fondant in your melting kettle. Then add 35 lbs of special egg fondant in your cream and mix thoroughly till melted; then add 5 lbs. of pecans that have been ground very fine; then add 4 ounces of maple flavor and color with some burnt sugar color; then add 5 lbs. of corn syrup and mix thoroughly; then cast in starch.

MAPLE PECAN CENTER FOR BOX GOODS

Melt your maple cream the same as with the ground pecans in, only instead of adding ground pecans have girls drop pecan pieces in your impressions in the starch; then run the maple cream on top of your pecan pieces in the starch. That will give you a center with a pecan in each piece.

FILBERT CREAM CENTER FOR BOX GOODS

Melt 100 lbs. of No. 1 cream fondant in your melting kettle. Then add 40 lbs. of special egg fondant in your cream and mix thoroughly through your cream; then add 5 lbs. of ground filberts and 8 ounces of vanilla flavor.

COFFEE CREAM CENTER FOR BOX GOODS

Melt 100 lbs. of No. 1 cream fondant in your melting kettle. Then add 35 lbs. of special egg fondant in your cream and add 1 pint of coffee extract and color with a little chocolate and caramel color.

COFFEE EXTRACT

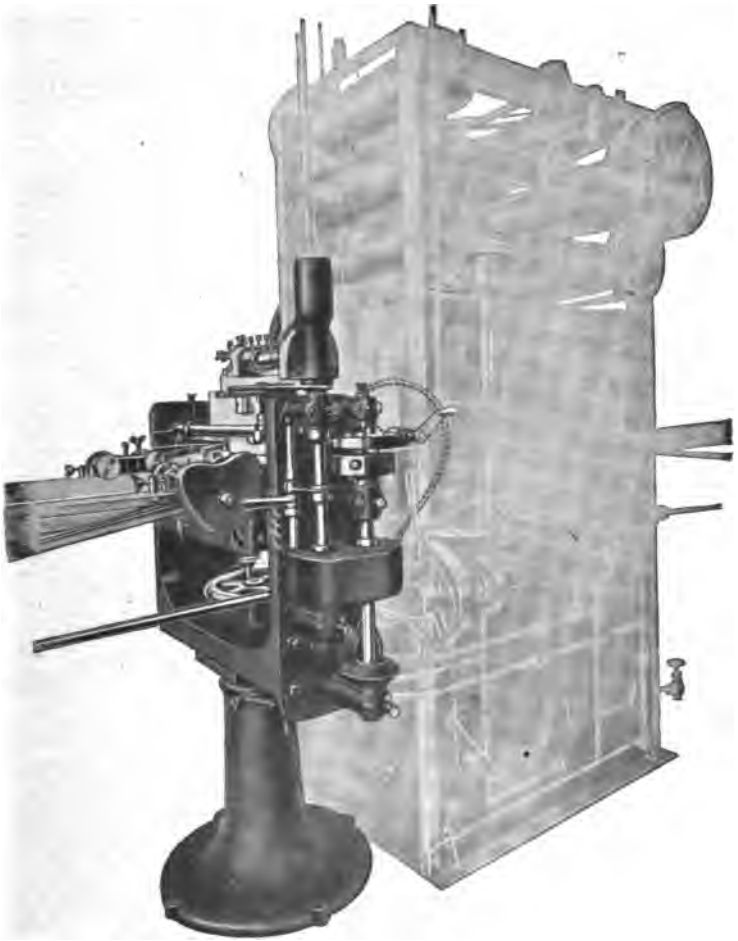
Cook 8 ounces of good coffee with 1 quart of water; then strain through a cheese cloth and add to your batch.

CREAM CENTERS FOR ENROBER DIPPED CHOCOLATE DROPS

Place in mixing kettle or melting kettle 100 lbs of cream fondant for the enrober dipped goods.

Now cook by steam kettle 80 lbs. of sugar and 20 lbs of corn syrup, with 3 gallons of water; cook to 238 degrees. Then pour this cooked syrup into your cream fondant in your mixing kettle and mix thoroughly; then add 40 lbs of special egg fondant and mix through so that it is thin enough to cast by depositor; then add 12 ounces of vanilla flavor.

The enrober chocolate dipping machine is an absolute necessity in every candy factory that is selling to the wholesale trade which manufactures a line of dipped chocolates, as pail specialties or bar goods. This machine will coat from 1,500 to 3,000 lbs of goods in a day, according to the size of the piece to be dipped.



Enroper Dipping Machine with Kilgren System.

In operating the enrober there should be one man who has charge of the machine in looking after the temperature of the chocolate and keeping the machine in a supply of chocolate, and should see that all parts are kept oiled. In supplying the feed belt with centers there should be two girls to feed the traveling belt and one to look after the

goods after they are dipped, before they go to the cooling room. Then there should be one girl to remove them to the board rack where they can be moved to any part of the cooling room to be packed.

The Kilgren system for decorating the chocolates is designed for use in connection with the enrober and will place different designs on top of the chocolates by this system which are so elaborate and effective that they could not be executed by hand except at a great expense. As the goods emerge from the enrober they pass under different streams of chocolate properly spaced, flowing from a small tank equipped with agitators. The tank is fitted with mechanism whereby it may be held in a stationary position to place a straight string on the chocolate, or it may be moved in several different directions to form different strings or patterns on the chocolates.

Showing Three Enrobers in Operation in a Wholesale Plant.

SETTINGS FOR THE KIHLGREN SYSTEM

TO MAKE A STRAIGHT MARK ON CHOCOLATES

Have the T guide in, set disc at No. 0, set speed lever at No. 0. Adjust spindle case so that the mark will come in the center of goods. Have stringer at the lowest point. Run wire belt fast. If irregular mark is obtained cut down the flow of chocolate from nozzle.

TO MAKE A ZIG ZAG MARK ON CHOCOLATES

Made with T guide in. Find center of goods. Set at graduation that will give the desired angle and speed lever at point that will give desired number of angular markings on piece. If with speed lever at No. 4 there are not enough markings, wire belt must be slowed down. Set eccentrics to give proper throw across. From 3 to 5 will give good results.

TO MAKE LEAR MARK

Make a zig zag, using disc at No. 24 and speed lever at No. 4. Run wire belt slow. Set attachment so that pendant wires will mark in center of goods.

LOOP OR CURL ON CHOCOLATES

Have T guide out and eccentric latches in. Regulate size of loop by eccentrics and number of loops on piece by speed lever and speed of wire belt.

POINTERS FOR KIHLGREN SYSTEM

Record all settings against name of goods on chart.

Speed of wire belt will affect markings. Record speed on various goods. Always adjust spindle case to center of goods.

When T guides are in, eccentric latches must be out, and *vice versa*. Indicators on eccentric must register alike.

The stringer may be raised or lowered by hand wheel un-

der extension. For most goods it is best to use at lowest point and obtain size of throw by eccentric adjustment.

If stringer warms up, open water valve for a moment. Under no circumstances leave the water turned on.

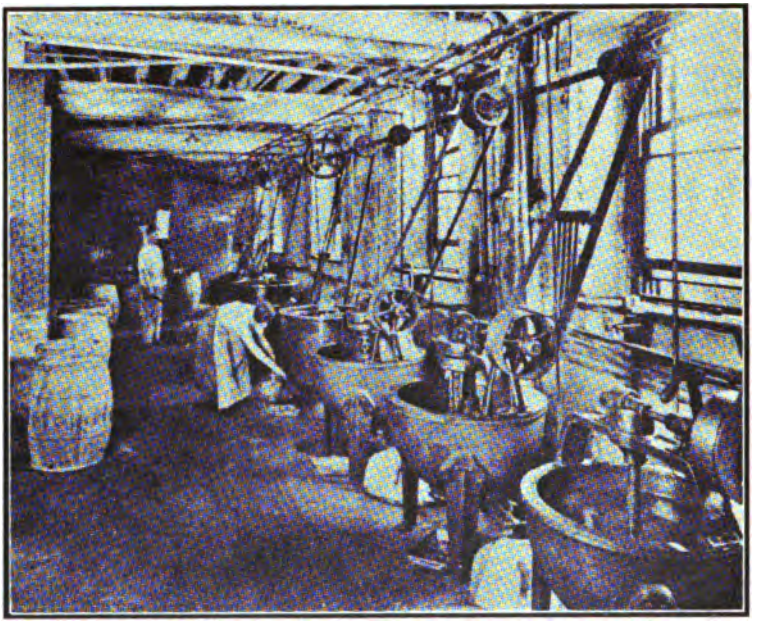
Throw in latches that vibrate center spindles occasionally, while they are running. This will clear nozzles. If a nozzle becomes plugged, screw down center spindle by raising gear out of mesh and turning to right and left, counting from either end;1, 3, 5, 7, 9 are right-handed (that is turn to right to screw down), and 2, 4, 6, 8 are left-handed. Do not turn down too hard, only to a bearing. Then open a proper flow.

The discs are graduated from 0 to 24. For loops or a straight mark have disc at No. 0. For zig zag use No. 4 to 24, according to angle desired.

The indicators on eccentrics are graduated from 1 to 7. As the pointer is moved to the higher figure, the throw is increased. With the stringer at the lowest point, 3 to 5 will give the best results.

You should always use a memorandum chart for the different kinds of goods, as it will save you a lot of trouble and time.

Racine Chocolate Melter and Mixer, Racine Machinery Co. Racine, Wis.



Melting Kettles for Blending Coatings for the Enrober, Dipping Machines and Hand Work.

For enrober dipping I would recommend that you buy your different kinds of coating from some reliable chocolate house and always carry in stock a line of liquor chocolate, sweet vanilla coating and a milk coating.

BLENDING THE DIFFERENT COATINGS FOR DIPPING

COATING FOR CHOCOLATE DROPS

Melt in your chocolate melting kettles, 40 lbs. of vanilla sweet coating, 10 lbs. of liquor chocolate, 3 lbs. of nuco butter.

COATING FOR BOX GOODS

40 lbs. of sweet coating, 15 lbs of liquor chocolate, 2 lbs. of cocoa butter.

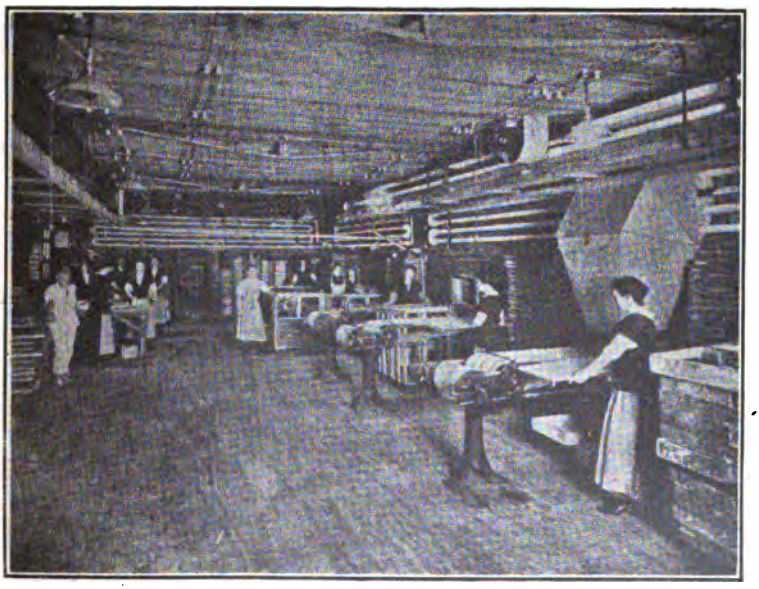
MILK COATING FOR BOX GOODS

40 lbs. of milk coating, 20 lbs. of light vanilla sweet coating.

Melt in your melting kettle and do not heat your milk chocolate but luke warm, as you will find by overheating milk chocolate your coating will get grainy or coarse. That is one reason I recommend the use of light vanilla coating blended with the milk chocolate, as this coating will stand up better in the summer time and will also make a smoother coating. During the summer months add 3 ounces of powdered gum Arabic in your melting kettle, after your chocolate is melted.

BITTER SWEET COATING FOR BITTER SWEET CHOCOLATES

Melt in your chocolate melting kettle, 30 lbs. of bitter chocolate or liquor, 30 lbs. of vanilla chocolate coating.

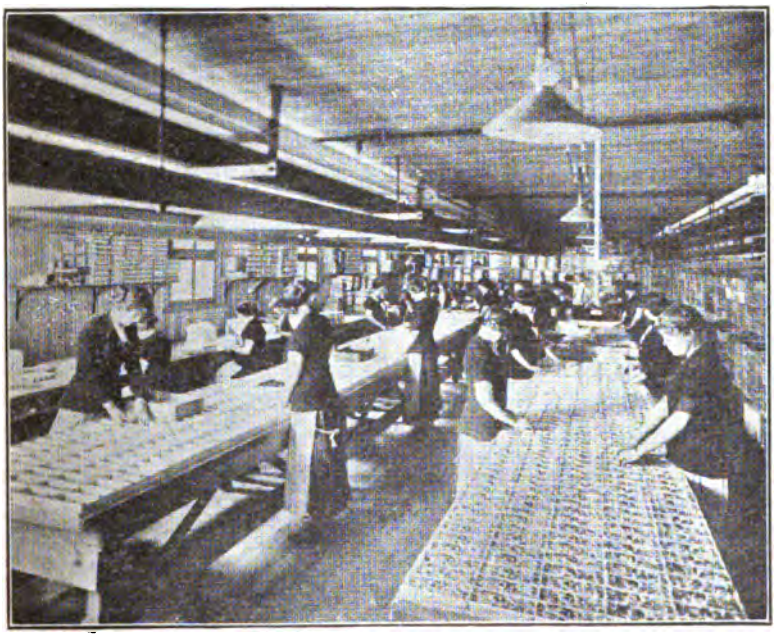


Showing Cooling Room for Receiving Enrober Dipped Goods.

The Portable Enrober Rack.

This rack is a great convenience and no wholesale manufacturer who has the enrober dipping machine should be without from 3 to 10 of these racks, for transferring their

plaques from the dipping machine, as these racks hold 48 plaques; so you see what a great space you can save in your cooling room. These racks are on rollers, thus facilitating their easy transfer from one part of the cooling room to another.



Showing Cooling Room where the Box Goods are Packed.

BAR SPECIALTIES DIPPED BY ENROBER MACHINE

PINEAPPLE CREAM CAKE OR BAR

Place in your melting kettle, 50 lbs. of No. 1 cream fondant and turn on the steam until your fondant is thin enough to cast, then add 25 lbs. of special egg nougat fondant. Mix thoroughly with just enough heat on your kettle so that your cream will be thin enough to cast; then add one-half

gallon of crushed pineapple that is cooked to a jam, and add 1 ounce of citric acid; then cast by depositor, using the large pumps, and have your moulds set so that two pumps will deposit in each cake or bar; then let stand in starch over night; then dip in thin chocolate on the enrober machine.

FOR PINEAPPLE BAR

Make your pineapple bar two colors, cast one-half of the bar a white color with crushed fruit and the other half a light pink color and flavor with strawberry flavor. Bar should weigh 1½ ounces before dipped.

CHERRY CAKE OR BAR

Melt in your melting kettle, 50 lbs. of No. 1 cream fondant, turn on the steam until your cream fondant is thin enough to cast, then add 20 lbs. of special nougat egg fondant and mix thoroughly so that your batch is thin enough to cast in starch; then add 3 lbs of Maraschino cherries that have drained over night and ground up fine, and one-half ounce of citric acid. Then cast by depositor, using large size pump. Let stand over night. If too soft to handle next morning, let stand two days, but if you use enough heat in melting down you can handle next morning.

CARAMELO MELLOW BAR

Cook by steam stirring kettle, 20 lbs. of corn syrup, 15 lbs. of sugar, 1 quart of water, 10 lbs. of condensed milk, 1 lb. of Nuco butter.

Cook to stiff ball when tried in cold water; must not be over 245 degrees. Add 2 ounces vanilla flavor and 1 ounce of salt. Pour out in depositor machine and cast a very shallow layer of caramel in your mould, about one-third to be caramel and two-thirds cream.

For the cream part place in your melting kettle 30 lbs. of No. 1 cream fondant and turn on the steam and heat until

your cream is thin, then add 15 lbs. of special nougat egg fondant and mix thoroughly with 2 ounces of vanilla flavor. Then cast by depositor on top of the caramel. That will give you a caramel bottom and a vanilla cream top; or, you can add 1 lb. of nuts of any kind ground very fine. This makes a very fine eating bar. Let stand until next morning, then dip on the enrober machine.

STRAWBERRY CREAM BAR

Place in your melting kettle 50 lbs. of No. 1 cream fondant. Heat your cream until it is thin enough to cast; then add 20 lbs. of special egg nougat fondant and mix thoroughly. Add 2 ounces of vanilla flavor and pour out half of your batch in your depositor and cast half of the mould with the white cream. Now take the rest of your batch and add 2 lbs. of crushed strawberries that have been cooked to a jam and color a light pink color. Then add one-half ounce of citric acid and pour out in depositor and cast on top of the white. That will give you a very good eating and looking strawberry cream bar. Then next day dip on the enrober with very thin coating of chocolate.

MAPLE PECAN CAKE

Place in your melting kettle 50 lbs. of maple cream fondant and turn on the heat until your cream fondant is thin enough to cast. Then add 25 lbs. of special egg nougat fondant, and mix thoroughly; then add some burnt sugar color, to make your cream a good maple color; then add 3 lbs. of pecans that have beeen ground up very fine, and pour out in your depositor; then cast in starch. You can have the girls drop pecan pieces in the moulds first, then cast your maple cream on top of these pieces. That will give you a rough top for your cake when they are dipped in thin chocolate, and will look very nifty.

MILK CREAM BAR

Place in your melting kettle 50 lbs. of No. 1 cream fondant, and heat your cream hot enough to cast. Then add 25 lbs. of special egg nougat fondant and mix thoroughly, then add 3 lbs. of roasted ground almonds, and 3 ounces of vanilla flavor; then pour in depositor and cast in mould that has a round top. Then let in starch until next day, and dip in a coating blended with half vanilla sweet and half milk coating.

BUTTER SCOTCH CREAM BAR

Cook by steam stirring kettle 15 lbs. of sugar, 15 lbs. of corn syrup, 1 pint of molasses, 1 lb. of nuco butter, 8 lbs. of condensed milk, 1 quart of water.

Cook to stiff ball when tried in cold water or to 245 degrees. Then add 3 ounces of salt and 2 ounces of vanilla flavor. Then pour into depositor and cast only one-third of the bar with this butter scotch. Then run the rest of your bar with your cream.

CREAM FONDANT FOR BUTTER SCOTCH BAR

Place in your melting kettle 30 lbs. of cream fondant and heat up thin enough to cast. Then add 15 lbs. of special egg nougat fondant and mix thoroughly. Then add 2 ounces of vanilla flavor and pour out into your depositor and cast on top of the butter scotch. Let stand until next day, then dip by enrober machine. Bar to weigh 2 ounces when dipped.

APRICOT JELLY CREAM BAR

Place 8 ounces of jap gelatine with 2 gallons of water in a steam jacket stirring kettle; then turn on the steam and cook your batch until your Jap gelatine is thoroughly dissolved.

Now when your Jap gelatine is dissolved add 15 lbs. of sugar and 10 lbs. of corn syrup and cook this batch until your jelly strings from a paddle; then strain through a

sieve and let stand in a kettle to cool. Now while this batch is cooling, take 1 gallon of Spanish apricot pulp, and run through a sieve. Take a brush and rub your apricot through the sieve. Then place your strained apricot in a steam kettle, with 5 lbs. of sugar and 3 lbs. of corn syrup and cook this apricot jelly until it gets thick, or drops in sheets from your paddle. Then pour this apricot jelly in your Jap jelly batch and mix the two together. Then if your jelly is cool enough to hold your finger in the jelly, it is cool enough to cast by depositor. If you wish the apricot tart, add 2 ounces of citric acid just before you pour your batch into the depositor.

Now set your pumps on the depositor so that you will only deposit a very thin sheet of jelly in your mould, just so the bottom of the mould is covered.

NOW FOR YOUR CREAM FOR YOUR APRICOT BAR

Melt in your melting kettle 30 lbs. of fondant cream thin enough to cast. Then add 15 lbs. of special egg nougat fondant and mix thoroughly; then add 2 ounces of vanilla flavor and mix, then pour out in depositor and cast on top of your apricot jelly. Let stand in starch until next day, then dip by enrober in very thin chocolate.

CREAM WALNUT BAR

Place in your melting kettle 50 lbs. of No. 1 maple cream fondant and heat so it is thin enough to cast; then add 25 lbs. of special nougat fondant and mix thoroughly; then add some burnt sugar color to give your batch a light maple color, then add 1 ounce of maple flavor and 2 lbs of walnuts ground up fine, and mix through your batch; then pour in depositor, using large size pumps for depositing your cream in bars.

For walnut top bar, use the plain maple cream batch, and have girls drop some walnut pieces in the impressions; then

cast your cream on top of the walnut pieces. That will give you a rough top which will show up well when dipped in thin chocolate on the enrober.

TUTTI FRUTTI BAR

Place in your melting kettle 50 lbs. of No. 1 cream fondant and heat thin enough to cast. Then add 20 lbs. of special egg nougat fondant and mix thoroughly. Then add 2 ounces of vanilla flavor. Then add 8 ounces of ground figs, 8 ounces of cherry pieces, 8 ounces of ground pineapple, 8 ounces of Sultana raisins ground up fine; then mix your fruit thoroughly through your cream and cast by depositor in round or bar shape.

MELLOW NOUGAT CAKE

Place in your melting kettle 50 lbs. of No. 1 cream fondant maple, then heat your cream hot enough to cast, then add 25 lbs. of special egg nougat fondant and add enough burnt sugar color to give your cream a maple color. Then add 2 ounces of maple flavor. Then heat up thin enough to cast by depositor in a round mould, and only fill the mould half full of maple cream; then make a batch of marshmallow for the other half of the cake.

MARSHMALLOW MADE FOR MELLOW CAKE

Soak 12 ounces of gelatine in 2½ quarts of water. Then place your dissolved gelatine in your steam kettle and only use enough heat on your kettle to dissolve your gelatine. Then, when your gelatine is dissolved, add 12 lbs. of granulated sugar and 2 lbs. of corn syrup, and only use enough heat on your kettle so that your sugar will dissolve; then, when your sugar is dissolved, place your batch in your marshmallow beater and beat up very light and stiff.

Now then, when your batch is very light, heat up in your steam kettle 12 lbs. of corn syrup, so that it is hot, but do not let it come to a boil. Then add this heated corn syrup

to your batch that is beaten up, and beat up until very light. Then place in your depositor and cast on your maple cream.

Use 2 ounces of vanilla flavor, just before you are ready to stop your beater and mix in thoroughly. This mellow nougat cake must be left in starch for 2 days before it will be hard enough to handle to dip on enrober.

ORANGE CREAM CAKE

Place in your melting kettle 50 lbs. of No. 1 cream fondant and heat this cream fondant hot enough to cast; then add 25 lbs. of special egg nougat fondant and mix thoroughly in your cream. Then add half a gallon of ground orange fruit.

Take 6 oranges and grind up through the food chopper. Then place 2 lbs. of sugar with 1 lb. of corn syrup and your ground oranges in your cooking kettle, and 1 pint of water, and cook to a heavy jam. Then it is ready to use in your batch.

Then pour half of your batch in the depositor and deposit in your mould half full of this white cream. Then color the rest of your batch in your melting kettle, a light orange color, and fill the balance of the mould up with this orange color cream. That will give you a very good looking piece of goods when dipped on the enrober machine in a dark coating.

FUDGE CREAM BAR

Cook in steam jacket kettle with stirrer, 15 lbs. of sugar and 15 lbs. of corn syrup, 10 lbs. of condensed milk, 1 lb. of nuco butter and 1 quart of water. Cook this batch to a stiff ball when tried in cold water. Then turn off the steam on your kettle and add 5 lbs. of short fondant cream and stir this batch for 5 minutes by machine. Then add 2 ounces of vanilla flavor and 1 ounce of salt and mix. Then pour in depositor and cast just enough in the mould to make a very thin sheet. Then run the balance of the mould with cream.

CREAM MADE FOR FUDGE BAR

Place in your melting kettle 50 lbs of No. 1 cream fondant and heat enough to cast; then add 20 lbs of special egg nougat fondant and mix thoroughly. Then add 2 lbs. of ground pecan nut meats and 2 ounces of vanilla flavor and 1 ounce of salt. Then cast with depositor. Let stand in starch until next morning. Then dip on enrober machine in thin coating.

BUTTER CREAM CAKE

Cook in steam kettle 40 lbs. of sugar, with 12 lbs. of corn syrup, 1 gallon of water and 2 gallons of 20 per cent cream. Cook this batch to 240 degrees. Then pour out on Dayton ball cream machine, and when partly cool start to cream to a fondant. When your batch is creamed, place your 52 lbs. of this cream fondant in your melting kettle and heat hot enough to cast. Then add 22 lbs. of special egg fondant and mix your egg fondant thoroughly through your cream fondant. Then add 4 ounces of vanilla flavor with 1 ounce of salt, and mix. Then pour in depositor and cast in a round shape.

HONEY NOUGAT BAR OR CAKE

Cook in steam kettle 40 lbs. of sugar with 10 lbs. of honey and 12 lbs. of corn syrup and 1 2-3 gal. of water. Cook this batch to 240 degrees. Then pour out on Dayton ball cream beater and when partly cool start to cream to a fondant. Now then, when your batch is creamed, take it from the beater and place it in your melting kettle and heat your cream hot enough to cast. Then add 30 lbs. of special egg nougat fondant and mix thoroughly. Then add 2 ounces of vanilla flavor and place in depositor and cast in round or bar shape. Then dip in thin coating on enrober machine.

BRAZIL MAPLE CREAM CAKE

Place in your melting kettle 50 lbs. of No. 1 cream fondant and heat your cream fondant hot enough to cast. Then add 22 lbs. of special egg fondant and mix thoroughly. Then add 2 ounces of maple flavor and 2 lbs of ground Brazils and enough maple color to color your batch a light maple. Then place in depositor and cast in a round shape that will weigh 1 2-3 ounces before dipped, or 2 ounces after dipped.

CARAMEL MELLOW BAR

Cook by steam kettle 20 lbs. of corn syrup, 12 lbs. of sugar, 1 quart of water, 10 lbs. of condensed milk, 1 lb of nuco butter. Cook to soft ball, then add 3 lbs. of liquor chocolate that is cut up fine and cook your batch to stiff ball, or 245 degrees when tried in cold water. Then turn off the steam and add 1 ounce of vanilla flavor and 1 ounce of salt and pour in depositor and cast a very thin layer of caramel in your bar mould. Then fill the balance of the bar with marshmallow.

MARSHMALLOW MADE FOR MELLOW BAR

Soak 12 ounces of gelatine in 3 quarts of water. Then place your gelatine and water in your steam kettle and heat your gelatine until it is thoroughly dissolved. Then add 12 lbs. of granulated sugar and 2 lbs. of corn syrup, and dissolve your sugar in your gelatine water. Then place in your marshmallow beater and beat up very light. When your batch is light and stiff place in your kettle 12 lbs. of corn syrup and heat your corn syrup up so that it is hot, but do not let it boil. Then add this hot corn syrup to your batch that has been beaten up light and beat up just stiff enough so that you can cast it with the depositor. Then add 2 ounces of vanilla flavor. Then let stand in starch for 2 days. Then dip on enrober in thin coating.

OLD PLANTATION CREAM BAR

Cook in steam kettle 40 lbs. of southern sugar No. 10 with 12 lbs. of corn syrup and 1½ gallons of water. Cook to 240 degrees, then pour out on Dayton ball cream beater, and when partly cool start to cream your batch to a fondant. When your batch is creamed place your batch of cream in your melting kettle and heat hot enough to cast; then add 22 lbs. of special egg fondant and mix thoroughly. Then add 2 lbs. of ground roasted Spanish No. 1 peanuts and mix; then add 3 ounces of vanilla flavor and place in depositor and cast in a flat bar; then let stand over night; then dip on enrober machine.

By casting your cream plain and having girls drop Spanish roasted peanuts in your moulds will give you a rough top when dipped in thin chocolate which will show up very good.

COLLEGE CREAM BAR

Place in your melting kettle 50 lbs. of No. 1 cream fondant and heat your cream fondant hot enough to cast, then add 25 lbs. of special egg nougat fondant and mix thoroughly; then add 2 lbs. of almond paste and mix your almond paste so that it is thoroughly melted in your cream. Then cast part of your mould with this white batch and color the other half of the batch a maple color and flavor with 2 oz. of maple flavor. Then cast this maple on top of the white, which will give you two colors for your bar. Then let stand over night; then dip in thin chocolate on enrober.

MECHANICAL REFRIGERATION FOR CHOCOLATE COOLING ROOM

A necessity in the up-to-date confectionery manufacturing plant. The confectionery industry in the United States has been developing so fast in the last few years that up to the present time no confectioner can afford to be without mechanical refrigeration in his plant, for his chocolate cooling room, in the manufacture of chocolates by machine dipped or by hand work.

The trouble and annoyance common to the old method of producing refrigeration with salt and ice, icing up, and the drip and dirt every morning, all this trouble will disappear by the use of mechanical refrigeration in your plant for cooling your chocolate cooling room and storage room.

Until recent years the chief objection to mechanical refrigeration the confectioners had was the initial cost of installing mechanical refrigeration in his plant. But for the present-day users the York inclosed machine has eliminated this main objection. The initial expense, operating cost and upkeep of a York system are now at a point where they are easily within reach of the very smallest confectioner who manufactures chocolates or makes his ice cream or cools his soda fountain by mechanical refrigeration. As I have had 25 years of experience in the different wholesale and retail plants, and as I have come in contact with the different makes of machines, I do not hesitate to recommend the York inclosed machine for mechanical refrigeration for cooling room, ice cream making and cooling the soda fountain and harding room for storage cooling room, as my experience with the 2 and 6 ton machine and York system it is more economical and more satisfactory than any of the other different systems that I have come in contact with in the different wholesale and retail plants, as the York machine does not require a skilled mechanic to operate it. Any man or boy, with a few instructions, can take the machine and pro-

duce the very best results, and the machine does not require constant attention like most of the machines that I have come in contact with. I have used the same charge of ammonia over one year in operating the York machine

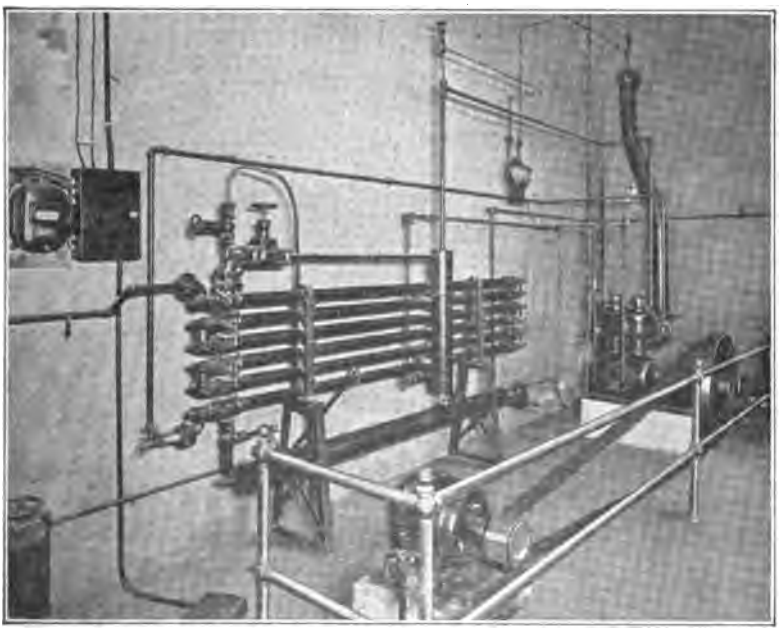
For those just starting in the confectionery business or who intend to install mechanical refrigeration this is a matter worthy of consideration in these days of keen competition, and you will find it is the progressive confectioner who always survives and profits.

York Inclosed Machine, manufactured by York Manufacturing Co., York, Pa.

REFRIGERATION IN CANDY MANUFACTURE

For instance, there are special details in regard to candy manufacture, which are absolutely essential from a manufacturing confectioner's viewpoint, in the operation of his plant, and the mechanical refrigeration installation must be adapted to meet all these requirements. Refrigeration in candy manufacture is used primarily for storage, and sec-

ondarily in the chocolate coating department. The majority of the small confectioners' plants operate under city conditions; that is, they generally have their space extending over several floors, and the basement is used for the machinery, the first story for supplies and shipping room, and the remaining part of the building for the manufacturing end of their business.



Showing a York Refrigeration System.

In regard to the York system, this system occupies comparatively a small space for a 6-ton plant.

Fortunately, low temperature is not required in the manufacture of chocolate work and for storage for chocolate dipped goods. For storage for chocolate dipped goods 66 to 68 degrees is the most satisfactory. For dipping chocolates by enrober machine to dry, 64 degrees is the most sat-

isfactory. For hand dipping 66 degrees will always give the best results.

Your chocolate dipping room for enrober or hand dipped goods should have the best of insulation on the walls obtainable. Cork board is always used for the best insulation for refrigeration rooms. While more expensive than the other methods used for insulation, the cork board will always pay for itself in the long run on account of its greatly increased efficiency.

As there are two methods in use for cooling the chocolate room, the direct expansion and the indirect method.

The direct expansion, I find, gives the best results where the pipes are installed on the side walls and ceiling of the chocolate room with drip spouts to drain off the water when you close your machine down every night.

The indirect system is where you have a bank of coils enclosed in a box or small room. Then by delivering the cold air in your chocolate room by tin pipes. From my experience with three of these systems I would not recommend this system at all for the manufacturing confectioner, and the same with pipes for blowing cold air on your chocolates on the dipping tables, as the work turned out by this method never gives the best results where, if your room is 66 degrees, you do not have any trouble in your goods drying.

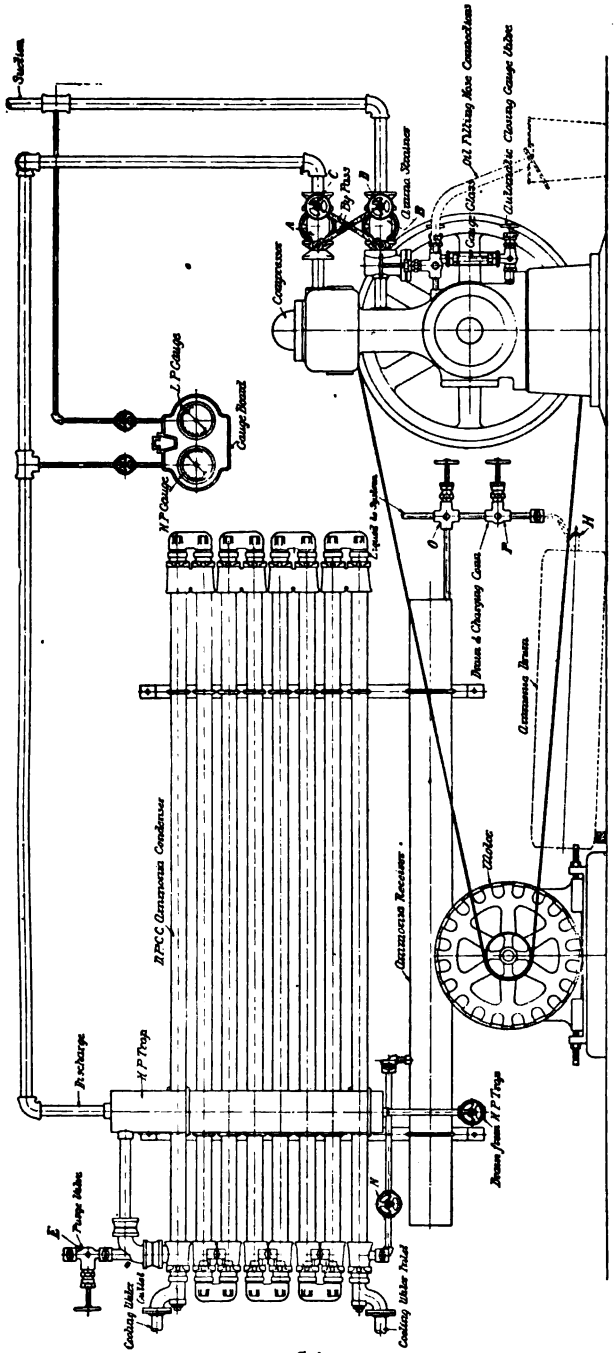
A 2-ton York system will handle a room 24x24x9ft. ceiling, even during the warmest summer months. But for a large wholesale manufacturer, I would recommend the 6-ton system, as they always have 2 to 3 cooling rooms for their chocolate work.

Mechanical refrigeration, which is developing so fast with the manufacturing confectioners who are in the wholesale and retail work, the time has come for every candy maker to make it his business to study up mechanical refrigeration, as when you leave one position and take up another, you may be called upon to take full charge of the plant which has a refrigeration system for their cooling

rooms or ice cream work. So when you are called upon to take charge of the plant, if you can turn out a line of candies and you do not know anything about mechanical refrigeration, you are looked upon as a back number, where if you had taken time to study up on mechanical refrigeration, you would have been in position to take complete charge of the plant, as you will find by traveling from one position to another that a good many of the small wholesalers and retailers will expect the man in charge of the plant to look after the refrigeration part that goes in the manufacture of chocolate work, as they do not want to hire an experienced man to just look after the machine once or twice a day.

So, for the benefit of the candy makers who are interested in refrigeration, I will give them my 5 years' experience, and two years' experience with the York system:

INSTRUCTIONS FOR OPERATING THE YORK MACHINE



1. Turn water on the condenser, and water on the jacket of the machine.

2. Open top valve A, which is the discharge, wide open.

CAUTION—Never start the machine with valve A or discharge valve closed, except when you have to use the by-pass valve D, which will relieve the high pressure by going in the low pressure of the machine.

3. Now then, start the motor on the machine.

4. Open valve B, on the machine or suction valve, a quarter of a turn, until the suction gauge or low pressure gauge reads 15 lbs. Then open suction valve wide open.

5. Now then, open valve O, or the ammonia tank valve, wide open.

6. Then regulate the expansions valve on the chocolate room, or whatever you expect to cool, until the suction pressure gauge reads 15 lbs.

7. How to use the By Pass Valve:

If the machine will not start as the above on the high pressure valve open, stop motor and use by pass as follows. Close valve A, or high pressure valve. Open valve B, or suction valve one turn, and valve D wide open, or by pass valve, then start machine, and as soon as machine is turning over, begin opening valve A, or high pressure valve, at the same time closing by pass valve D. When suction gauge reads 15 lbs. open B, or suction valve, wide open. Then proceed as in No. 5, instruction sheet.

TO STOP THE YORK MACHINE

No. 1. Close valve O. or ammonia valve, and then close the expansion valve on your cooling rooms, and then allow the machine to run until the suction or low pressure gauge reads 5 lbs.

No. 2. When your low pressure gauge reaches 5 lbs. close the suction valve B on the machine.

No. 3. Stop the machine.

No. 4. Close discharge valve A, or high pressure valve.

No. 5. Turn off water from the condensers and from the water jacket on the machine.

Purging the condenser in case you should get air into the system, which will cause a very high pressure on your high gauge, as when your high pressure is over 190 lbs. pressure there are two reasons that your condensers are not getting enough cold water, or that you have got the sytsem full of air; 170 lbs. to 180 lbs. of high pressure is all right during the hot weather, but in cool weather 160 lbs. is about right for your high pressure.

Purging the condenser should only be performed when unusually high condensing pressure shows that the presence of air or foul gases are in the condensers.

CHARGING AMMONIA INTO THE SYSTEM

Connect snipping ammonia drum to valve P, or ammonia receiver, having drum in position as called for on the manufacturer's tag, attached to drum valve H. Open drum valve slowly, and if connections are tight, start the machine, leaving O shut on the ammonia receiver. Open valve P slowly and regulate suction pressure as usual with the expansion valve.

When the high pressure gauge reads from 170 to 180 lbs. close drum valve H. Pump down till suction valve reads 10. Close valve P and slowly open valve O if the plant is to stay in operation. If the plant is to be closed down leave valve O closed. Charging with ammonia is necessary only when you are unable to get frost through the expansion coils to the machine.

CAUTION.—When disconnecting drum from valve P be sure that valve P is closed, and drum valve H is tightly closed. Open flange coupling in connection pipe very slowly.

PUMPING OUT FOR REPAIRS

To pump out condenser only, close valve A or high pressure and valve B, or low pressure and N, or valve that goes to the ammonia receiver. Then open valve C and D by

pass valves. Then drain all the water from the condenser to prevent freezing. Then run the machine until the high pressure reads 15 below the zero, or 15 lbs. of vacuum.

If the ammonia receiver is to be pumped out, open valve N, or valve that goes to the ammonia receiver to the condenser. Then close valve O, and proceed as above.

You may have to pump down several times before all the ammonia is removed, and that the high pressure gauge will remain below zero after shutting down.

After the repairs are finished and before admitting the ammonia, the air must be exhausted from the parts which have been opened up. Then close valves A, B and D and remove the plug from tee in line connection to valve D. Open valve C, then run the machine until the high pressure reads 26 vaccum. Then shut down. Replace the plug in tee and close valve C. Then start the machine in the regular way to put plant in operation.

GENERAL INSTRUCTIONS

Keep oil to proper level in crank case and the out board bearing. Use only ammonia oil in crank case. Drain oil from high pressure trap weekly.

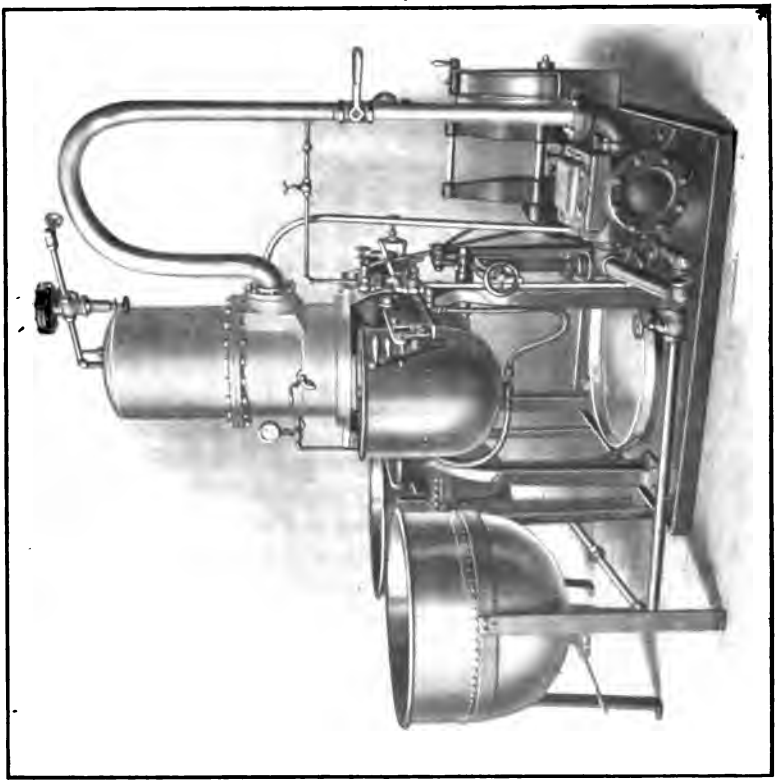
The ammonia strainer in the suction line close to the machine should be cleaned at least once every season.

For filling oil in the machine crank case use half-inch hose sent with the machine. Attach same to three-eighths inch valve screw in side of crank case.

Now then, place a bucket of oil on the floor and have the end of the hose well down in the bottom of the bucket. Run the machine a few revolutions with suction valve B closed, then open threee-eighths oil valve, allowing oil to enter to the required height in the glass. Keep end of the hose covered with oil, so that no air will be sucked into the system.

HARD BOILED SPECIALTIES

BY THE CONTINUOUS COOKER



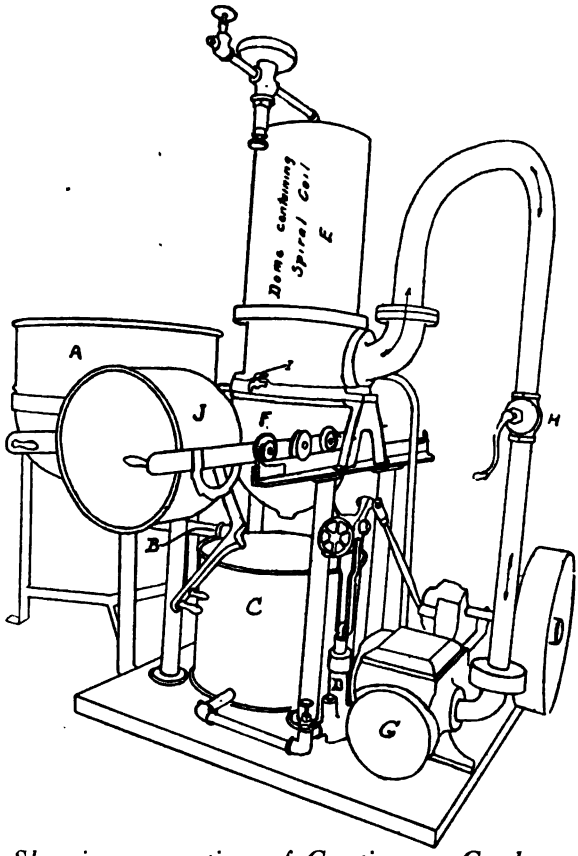
Continuous Cooker, Manufactured by National Equipment Co., Springfield, Mass.

MODERN METHODS FOR HARD BOIL GOODS

Modern methods and machinery are absolutely a necessity in every wholesale plant that is turning out a line of hard boil specialties that is sold to the jobbing trade, and in my 25 years of experience working in the different departments of a candy factory there is more danger of working at a loss in your hard goods department than any other department. Hard goods, when they are produced on the open fire by the use of corn syrup, they will never have the keeping quality that can be produced by a vacuum, as your syrup when it is poured out on the cooling slab, is very runny, like where syrup cooked by continuous cooker comes out a stiffer consistency, which has been tested out time and again that hard goods when cooked by a vacuum process will produce a finer piece of goods and also a drier piece of candy that is less susceptible to climate changes. The one great advantage the continuous cooker has is that you can maintain a 26-inch vacuum on your goods where by the vacuum pan process you can only pull your vacuum to 14 inches, except the end of the operation you can get 18 to 20 inches of vacuum on your goods, and then you must be very careful that you do not pull your syrup over in the condenser.

Where, by the use of the open fire work you can not produce any vacuum at all. That is why goods cooked on the open fire are more liable to be susceptible to climate changes.

The illustration will give you a very good idea of the method that is used in operating the continuous cooker in the manufacture of hard boil specialties.



Showing operation of Continuous Cooker.

The ingredients, composed of sugar and corn syrup, are cooked to a temperature of 232 degrees in your melting kettle, A. This mixture is then drawn off through the pipe, B, into the receiving tank, C. From this tank the syrup is removed by the small feeding pump, D, and forced into the coil, E, at any desired speed. Coil, E, is surrounded with live steam at a pressure of 65 lbs., varying with the capacity of the machine. After passing through coil, E, the cooked

syrup is discharged into kettle, F, where a vacuum of 26 inches is maintained by the pump, G.

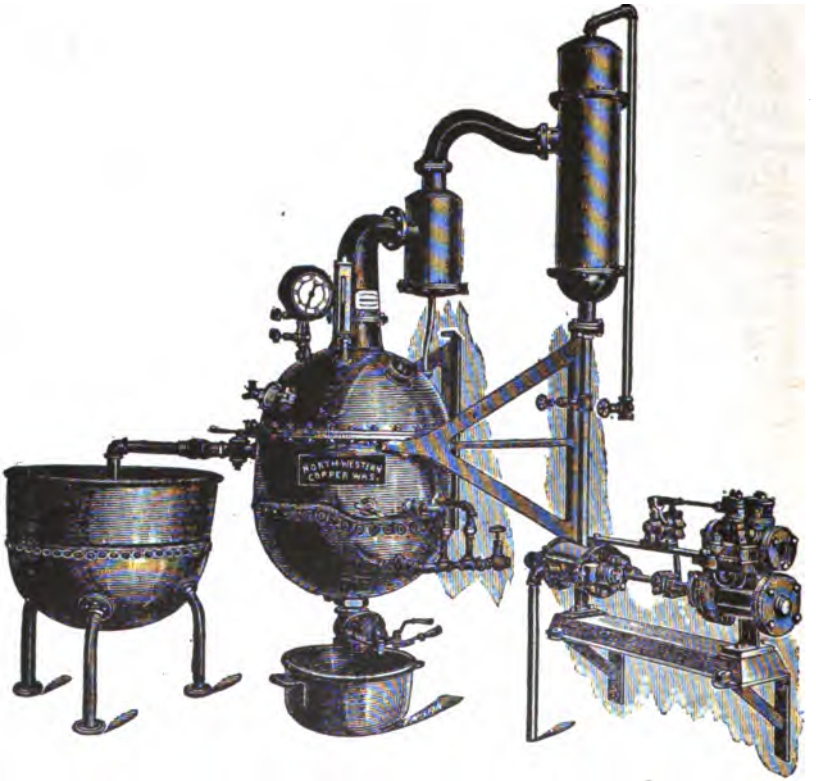
When a sufficient quantity of the cooked syrup has been discharged into the kettle, F, the valve, H, governing the vacuum pump, is closed, and the air cock, I, is opened, thus breaking the vacuum and allowing the removal of kettle, F, and placing kettle, J, in its place. After which the same operation may be repeated. Changing the kettles requires only a few minutes, and the operation of the machine is only slightly interrupted.

The arrows in the drawing, indicating the course of moisture, smoke and steam resulting from the boiling process in coil, E, shows that these are drawn off through the vacuum pump.

The maintenance of a 26-inch vacuum above the cooked syrup aids in the production of a finished product much drier and less susceptible to climate changes.

VACCUM PAN PROCESS FOR HARD BOIL GOODS

As there are a good many of the houses that still have the vacuum pans, and for the benefit of the candy makers who are working on hard goods specialties, I will explain the process that is used in operating the vacuum pan.



Showing Vacuum Pan for Cooking Hard Goods.

COOKINK HARD BOIL GOODS BY THE VACCUM PAN PROCESS

Place your ingredients, composed of sugar and corn syrup and water, in your cooking kettle and cook your batch to 235 degrees. Then start your pump going with cold

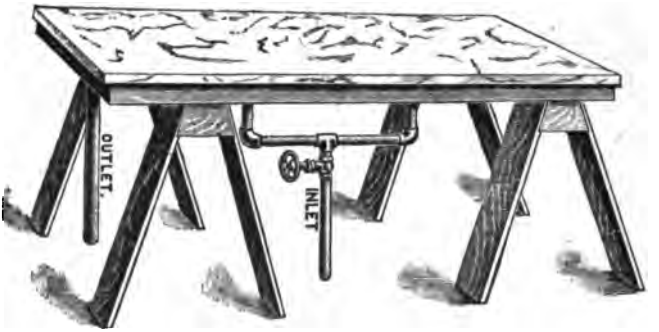
water turned on the condenser, and run your vacuum to 10 inches on the gauge. Then open your gate valve form the cooking kettle to the vacuum kettle and draw your syrup into your vacuum pan. Then close your gate valve and turn on the steam on your vacuum pan and start to cook your batch. You must hold your vacuum at 5 inches when your cooking gauge reaches 240 degrees, on your pan. Have your vacuum at 6 inches when your batch reaches 245 degrees on your cooking gauge. Have your vacuum at 7 inches when your batch reaches 250 degrees on your cooking gauge. Have your vacuum at 9 inches when your batch reaches 255 degrees on your cooking gauge, vacuum at 12 inches when your batch reaches 260 degrees on your cooking gauge, vacuum at 14 inches when your batch reaches 262 degrees. Then shut off the steam and run your vacuum up to 18 to 20 inches. Then shut off the water and stop the pump and open the air cock on top of the vacuum pan to release the vacuum. Then you can open the gate valve at the bottom of the pan to let your cooked goods out in a kettle that is greased and dusted with flour, and each crew should have their own kettle in receiving his amount that he is to handle for the different kinds of goods that he is working on.

Now, as soon as the batch is all out from the vacuum pan, turn on the steam in your pan and steam the pan after each batch with the bottom gate valve open, so that your steam will melt the candy that will cling to your outlet valve; that will keep it from sticking when you try to open it on your next batch, and all of these drippings can be used in your next batch, so there isn't any waste at all.

While you are cooking your batch on the vacuum pan your steam pressure should be about 90 lbs., for if you carry a low pressure your goods will not come out clear.

Never try to open the bottom gate valve before you open the air cock on top of the vacuum pan, so that your vacuum is released.

In the manufacture of stick candy of all kinds there should be three people to a crew, and each crew should have a cooling slab for cooling his batch when it comes from the cooker.



Stick Candy Cooling Slab.

The crew, consisting of one spinner, one roller and one girl to keep the batch in shape and roll the sticks as fast as they are spun out.

STICK CANDY MADE BY THE CONTINUOUS COOKER

Place in your melting kettle 120 lbs. of sugar. (for clear goods always use cane sugar), 40 lbs. of corn syrup, 4 gallons of water.

Cook this batch to 232 degrees in your receiving kettle, A. Then draw your batch off through the pipe, B, into receiving tank, C. The syrup is removed from tank, C, by the small feeding pump, D, and forced into coil, E, at any desired speed. Coil E, is surrounded with live steam at a pressure of 65 lbs. of steam. After passing through coil E, the cooked syrup is discharged into kettle F, where your vacuum of 2 6inches is maintained by your pump, G. When a sufficient quantity of your cooked batch has been discharged into kettle, F, the valve, H, governing the vacuum pump is

closed and the air cock, I, is opened, thus breaking the vacuum and allowing the removal of kettle F, and the placing the kettle, J, into its place, after which the same operation may be repeated. Changing kettles requires only a few minutes, and the operation of the machine is only slightly interrupted. A two-horse-power motor of 850 R. P. M. is required for the operation of the pump. The maintenance of a 26-inch vacuum above the cooked syrup aids in the production of a finished stick, which will be drier and less susceptible to climate changes.

Now then, as soon as your batch comes from the cooker pour your batch out on your cooling slabs that have been greased and dusted light with flour, and as soon as your batch is cool enough to handel, fold up the edges, and every crew should have a steel mixing bar to turn his batch up with, and to be used in barring his batch so that your batch will pull out smooth when spinning your stick. For if you do not bar your batch while on the cooling slab you will have trouble in spinning out the stick smooth, and you must never let your batch get too cold before you turn up the batch on the slab.

HOW TO MAKE COLORING FOR STICK CANDY STRIPING

Cook in a copper kettle on the fire, or by steam kettle, 1 lb. of dry color with 1 gallon of water, and when your batch comes to a boil add 2 lbs. of sugar and 3½ lbs. of corn syrup. Then cook your batch of color to a fine thread, then place in glass jars, and when cool it is ready to use.

COLORS AND STRIPES THAT ARE USED ON THE DIFFERENT KINDS OF STICK

Mint Stick Candy—White body, with one wide red stripe and four small red stripes. Use mint flavor.

Lemon Stick Candy—Clear body, with 1 wide pulled white stripe and 4 small pulled white stripes. Use lemon flavor.

Clove Stick Candy—Color one-fourth of your batch a dark red color. Pull your batch white for center. Then stripe with 3 small inlaid white stripes. Use clove flavor.

Sassafras Stick Candy—Pull your batch for body white. Then inlay 5 small light red stripes close together. Flavor with sassafras flavor.

Wintergreen Stick Candy—Pull your batch for body, then stripe your batch with 1 wide yellow stripe, with a small red stripe around the yellow, then 3 small red stripes on the other side of the batch. Flavor with wintergreen.

Cinnamon Stick Candy—Pull your batch for body, take one-fifth of the batch and color a yellow for jacket. Then inlay 4 small red stripes. Flavor with Cinnamon.

Orange Stick Candy—Color one-fifth of your batch for jacket an orange color. Pull your body white, and inlay 4 small red stripes in the orange jacket. Flavor with orange.

Anise Stick Candy—Color your batch a red color. Take a small piece from the batch before it is colored and pull for white stripe. Then inlay 6 small white stripes around the batch. Then flavor with oil of anise.

Spearmint Stick Candy—Color a small piece for a dark green. Then pull the body white. Then take a piece of the white and inlay 5 small green stripes. Then put on your batch. Flavor with spearmint flavor.

Horehound Stick—Clear body and pull a small piece for stripe. Then stripe with 5 small stripes. The flavor is cooked in the batch.

HOREHOUND STICK CANDY BY CONTINUOUS COOKER

Take 4 ounces of horehound herb and cook it in 2 gallons of water. Let stand for 30 minutes, then strain your herb through a cheese cloth or fine strainer.

Now place in your cooking kettle 120 lbs. of sugar, 40 lbs of corn syrup, 2½ gallons of water, 1½ gallons of strained herb water.

Cook this batch in your cooking kettle to 232 degrees, then draw your batch in receiving tank and finish like instructions for cooking on the continuous cooker.

POINTERS ON HARD GOODS

For stick candy, add your different flavors on the cooling slab, and wherever you can, use oil flavors instead of extracts.

For handling the batch for stick candy, always turn the batch up as soon as it starts to get cool, and start to bar the batch, regardless of whether the batch is clear or pulled.

For ordinary stick candy sold to the grocery trade, pull your pulled body good, as this stick does not call for a high gloss. The stick that takes with them is the dry stick that does not stick.

You can use a higher percentage of corn syrup than the formulas call for, but it never pays to doctor the stick too much, for what is gained by the heavy doctoring is lost through sales from your customers.

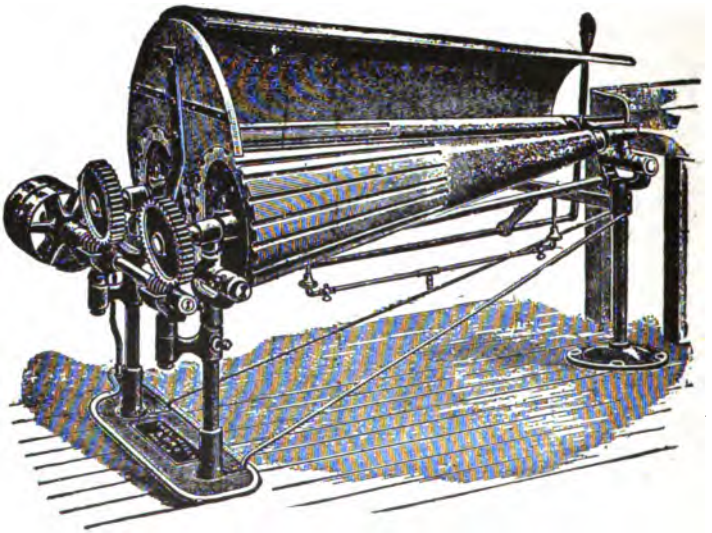
For stick candy that is used for jar goods or high gloss goods, your stick candy must be spun out as cool as it is possible, and when pulling the batch on the hook the air from the batch must be twisted out and then barred good on the slab or table.

In spinning out stick candy you should use cotton gloves for high gloss goods and the leather gloves for the common stick or drop machine goods.

For striping stick candy you will always get the best results by using the inlaid stripes, that is, take a part of the body; or, if you are using a jacket, lay the stripes in between the white, or whatever color you are working with, as by the old method you simply laid the stripes on the jacket or batch and the stripes are more liable to run or spread on your batch before you have finished the batch, where by using the inlaid method your stripes will always show up better on the finished goods.

FOR PURE SUGAR STICK CANDY

As most of this stick candy is pulled well on the hook and the air is left in the batch that is used for body with a clear jacket, otherwise you could not spin the batch out at all. By using one-fifth of your batch clear for jacket your goods will be very light and show a high gloss finish, and in striping always inlay the different color stripes that are used in this clear jacket.



Thomas Mills Bros.' Stick Candy Batch Spinning Machine.

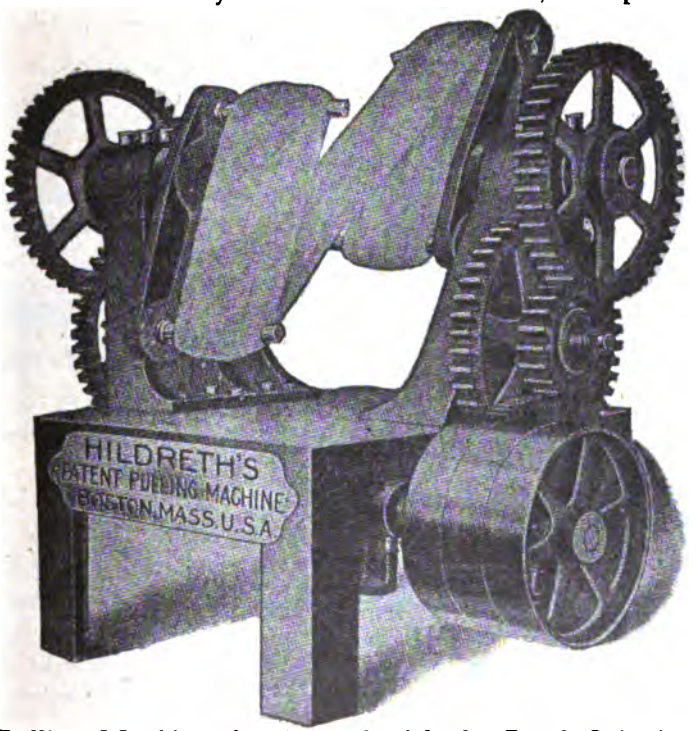
For any wholesaler who is specializing on stick candy this batch spinning machine is indispensable to any manufacturer who is selling stick candy to the jobbing trade, and in order to obtain the best results with this machine you should have the candy pulling machine on account of the large size batches that are handled with the spinning machine. The batch, after it is laid up, is placed on rollers, and it is then kept in a conical shape for spinning at the right temperature, until the entire batch has been spun out and de-

livered at the end of the machine ready to be spun out by the spinner.

The batch is kept at the right temperature by means of a gas attachment, and the driving pulleys are arranged so that they may be reversed, thus changing the direction of the rollers, so as to keep the stripes perfect.

Your table that is used for spinning out on should be long enough and wide enough to take care of a 200-pound batch, and as soon as the batch is spun out and the sticks are cool enough, they should be cut in sticks the desired length, then packed in cartons.

During the hot weather you should have an electric fan on the table to cool your sticks as soon as they are spun out.



Pulling Machine that is used with the Batch Spinning Machine.

NEW METHODS FOR HIGH GLOSS STICK OR JAR SPECIALTIES

Cooked by continuous cooker.

Formula for high gloss doctoring, to be used in the manufacturing of high gloss specialties, stick or jar goods. Made for the vacuum or open fire work, which will give you a better doctor than by the use of cream of tartar.

Hard goods when made by this new method will retain a better gloss and also a better keeping quality than you can produce by the use of cream of tartar or corn syrup.

Hard goods, when made by this method, spin out very smooth in the manufacture of small stick or jar goods.

Formula: Cook in steam kettle 50 lbs. of cane sugar, 7 quarts of water, one-half ounce of citric acid.

When your batch starts to boil, place a cover over your kettle, to steam down the sugar. Then let your batch cook to 232 degrees. Pour out in a thin tub to cool for one hour, then pour out into a small keg or glucose barrel.

You can make 500 lbs. as easily as 50 lbs., as this high gloss doctoring will keep even during the hot weather months, as I have kept it in stock for four months.

FORMULA FOR USING IN THE MANUFACTURE OF PURE SUGAR STICK, HIGH GLOSS COOKED BY CONTINUOUS COOKER

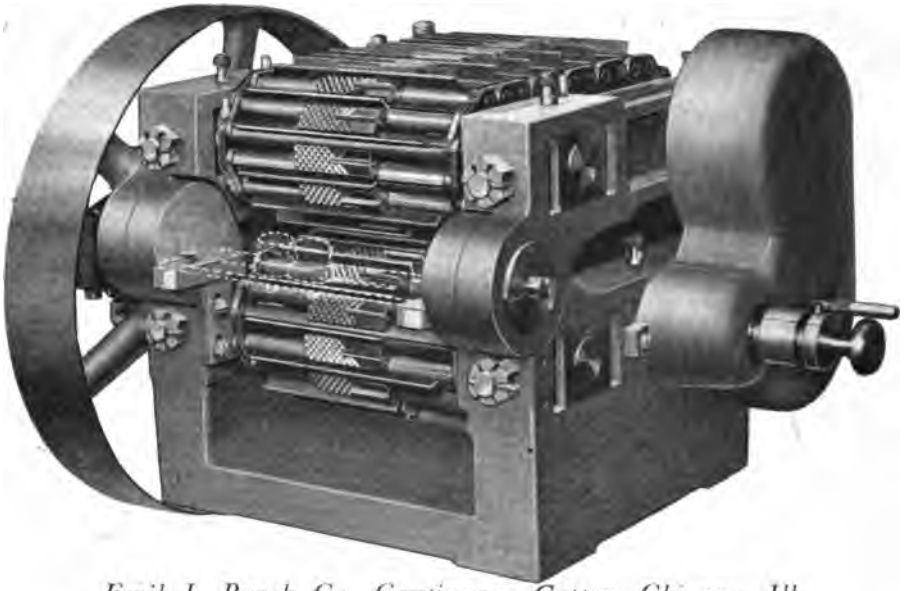
100 lbs. of cane sugar, 18 lbs. of high gloss doctoring, 4 gallons of water.

Place your 100 lbs. of sugar, 18 lbs. of high gloss doctor and 4 gallons of water in your cooking kettle and cook your batch to 232 degrees in melting kettle, A. Then draw your syrup off through the pipe, B, into receiving tank, C. From this tank the syrup is removed by small feeding pump, D, and forced into coil, E, at any desired speed. Coil, E, is surrounded with live steam at a pressure of 65 lbs. of steam. After the syrup passing through coil, E, the cooked syrup

is discharged into kettle, F, where a vacuum of 26 inches is maintained by the pump, G. When a sufficient quantity of cooked syrup has been discharged into kettle, F, the valve, H, governing the vacuum pump, is closed and the air cock, I, is opened, thus breaking the vacuum and allowing the removal of kettle, F, and placing kettle, J, in its place. After which the same operation may be repeated. Now, as soon as you remove the cooked batch from the kettle, F, pour out on your cooling slabs to cool, and in wholesale work about 60 lbs. is about the right size batch for sugar stick, and the small party stick 25 to 30 lb. batches. For straws or fruit centers, 30 to 40 lbs., according to size of piece to be spun out.

E. J. Brach Cutting Machine with York Batch Roller.

With this machine in your plant you can produce a very high grade assortment for pail specialties or jar goods, as the cutter has 4 sets of knives permanently attached to continuous rollers, which will cut pillows or buttercups, straws, chips or waffles. The guide, which is adjustable, feeds the batch of candy to any set of knives desired, and regulated to any width, from one-eighth to one and one-half inches.



Emil J. Brach Co. Continuous Cutter, Chicago, Ill.

ASSORTED FRUIT TABLETS

Cooked by vacuum work or pan, by the use of high gloss doctoring, which can be called pure sugar tablets.

100 lbs. of cane sugar, 16 lbs. of high gloss doctor, 4 gallons of water.

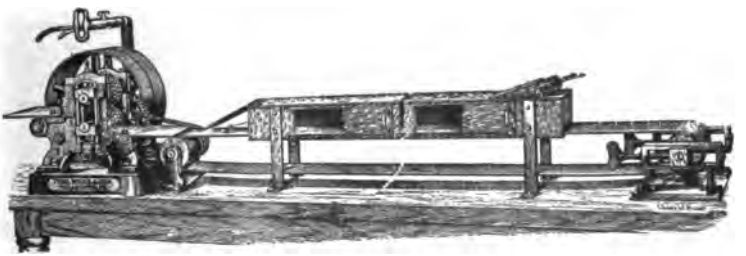
Place your 100 lbs. of sugar with 16 lbs of high gloss doctoring and 4 gallons of water in your cooking kettle and cook this batch to 235 degrees. Then start your pump on the vacuum pan and run your vacuum to 10 inches on your gauge, then open your valve and draw your batch into your vacuum pan, then close the valve from the cooking kettle to your vacuum pan, then pull your vacuum on the pan to 7 inches and your batch on the cooking gauge to 245 degrees on the pan. Vacuum at 9 inches your cooking gauge should be 250 degrees. Vacuum at 12 inches your cooking gauge should be 255 degrees. Vacuum at 14 inches your cooking

gauge should be 260 degrees. Vacuum at 16 inches your cooking gauge should be 270 degrees. Then turn off the steam on the pan and run your vacuum to 20 inches on the gauge. Then shut off the pump and water and open the air cock on top of the vacuum pan. That will release the vacuum in the pan. Then open the valve at the bottom and let your batch run out in a greased kettle that is dusted with a little flour. Then pour out on your cooling slabs, and when cool enough to handle add your different flavors.

For the horehound tablets cook to a boil 4 ounces of horehound herb in 2 gallons of water, then strain, and in place of using 4 gallons use only 2½ gallons of water to your sugar, and use 1½ gallons of horehound water that is strained through a very fine strainer.

When your batch is poured out to cool on the slab and you have added the flavor and colors and acids for the different kinds of fruit tablets, then run your batch through the fruit tablet machine.

Showing Fruit Tablet Machine with endless belt and cold air box. Thomas Mills Bros., Philadelphia, Pa.



Assorted fruit tablets made with corn syrup, by vacuum pan process:

Cook in melting kettle 300 lbs. of sugar, 90 lbs. of corn syrup, 7 gallons of water.

Cook this batch to 235 degrees, then draw into your vacuum pan and finish like instructions on vacuum pan work.

HOREHOUND TABLETS OR DROPS

Cook in melting kettle 300 lbs. of sugar, 90 lbs. of corn syrup, 5 gallons of water, 2 gallons of strained horehound herb.

Cook by steam kettle 1 lb. of horehound herb in 2½ gallons and let come to a boil, then let stand for 30 minutes, then strain through fine sieve, and it is ready to use.

Place your sugar and corn syrup and water and strained herb in your melting kettle and cook to 235 degrees, then draw into vacuum pan and finish by the vacuum pan process.

FOR LEMON FRUIT TABLETS

Leave the batch clear, then, when cool enough to handle on the slab, add 2 ounces of oil of lemon to every 100-lb. batch and add 8 ounces of citric acid to every batch. In adding citric acid to your batch, never add the acid on the slab until the batch is cool enough to handle with your hands, for if you add the acid while the batch is hot your acid will change the color of your batch, on account of burning the acid.

FOR ORANGE FRUIT TABLETS

Color your batch a light orange color and add 2 ounces of oil of orange flavor to every 100-lb. batch and add 8 ounces of citric acid to every 100-lb. batch.

RASPBERRY FRUIT TABLETS

Color the batch a red fruit color. When cool enough to handle add 4 ounces of true fruit raspberry flavor and sieve on the raspberry flavor 8 ounces of citric acid.

LIME FRUIT TABLETS

Color your batch a light green color and add 2 ounces of lime flavor, and then add 8 ounces of citric acid.

LICORICE TABLETS

Color your batch with powder charcoal that has been dissolved with a little water in a heavy paste. Color your batch so that it will have a black color, then add 3 ounces of powder licorice and 1 ounce of anise oil and mix your powder licorice and your color charcoal thoroughly in your batch, and do not let your batch get too cool before you start to knead in your color, or you will have trouble in getting all the color mixed through your batch.

MENTHOL HOREHOUND TABLETS

Make a batch of horehound and leave the batch the natural color that it is when it comes from the vacuum pan, then add 1½ ounces of menthol crystals and mix thoroughly through the batch, and when cool enough to handle run through tablet machine.

COUGH TABLETS FOR PACKAGE GOODS

Cook in the melting kettle 100 lbs. of sugar, 30 lbs. of corn syrup, with 3 gallons of water and 1 gallon of strained horehound herb, using 3 ounces of herb to the gallon.

Then draw your batch into the vacuum pan when your syrup is cooked to 235 degrees. Then finish like instructions on vacuum work.

Now then, when your batch is poured out on the cooling slabs, add 1 ounce of powder charcoal, 1 ounce of powder licorice, 1 ounce of pine tar, one-quarter ounce of oil of anise fiavoh, one-quarter ounce of oil of wintergreen flavor, one-quarter ounce of oil of sassafras flavor and mix these ingredients thoroughly in your 130-lb. batch, and when cool enough to handle, run through the tablet machine. Then pack in small 5 or 10 cent packages, which can be sold to the drug trade.

BUTTERCUPS COOKED BY VACUUM WORK AND CUT BY CONTINUOUS CUTTER

Jacket made by vacuum pan with corn syrup.

Place in the melting kettle and cook 100 lbs. of cane sugar, 30 lbs. of corn syrup, 4 gallons of water.

Cook this batch to 235 degrees. Then draw your syrup into the vacuum pan and finish like instructions on vacuum pan work.

When your batch is cooked on the vacuum pan then pour out on three cooling slabs, as this size batch is enough for three crews.

CENTER FOR BUTTERCUPS MADE BY STEAM KETTLE OR OPEN FIRE

Cocoanut Center—Heat 8 lbs. of corn syrup to a boil, then add just enough macaroon cocoanut to stiffen your corn syrup so that it will have a good body to your center; and you must have the center kept warm and always ready before the jacket is poured out on the cooling slab.

Flavor your center with 1 ounce of vanilla flavor.

For a white jacket, when your batch is cool enough to handle, then bar your batch good, and when it is cool enough to handle on the hook, pull your batch partly, then twist all the air out on the pulling hook; then place on the table, and bar your batch good, or rub your batch down with your gloves, so that your jacket is very smooth; then flatten the batch out on your spinning board and place your cocoanut center in the center of your jacket, then fold the jacket around the center and close both ends tight. Then it is ready to be cut into buttercups on the continuous cutter. While spinning this class of work your batch must be handled without any more heat on your spinning board than necessary, for if you heat your jacket too hot your buttercups will have a dull finish.

Racine Buttercup Machine, Manufactured by the Racine Machinery Co., Racine, Wis.

FOR ALMOND BUTTERCUPS

Heat 8 lbs. of corn syrup to a boil, then add enough ground almonds to stiffen your corn syrup so that it will have a good body, then add ½ ounce of salt. Your almonds for your center must be ground up very fine, and if you have the peanut butter machine, grind your almonds through that, and it will make a very fine almond center. If too thin, add some powder sugar. If you make an almond butter center you do not have to use any corn syrup, only heat the almond butter warm, and the almonds should be given a very light roast.

For apricot center, grind 8 lbs. of dry apricots through a food chopper very fine, then heat up in a kettle so that your center is warm, and then add 1 lb. of corn syrup. Should your apricot center be too thin you can add some macaroon cocoanut to stiffen up the center, and if too dry add a little corn syrup.

FIG CENTER FOR BUTTERCUPS

Grind up 8 lbs. of Figs in a food chopper, then add 1 lb. of corn syrup and heat your center in a bon bon kettle, or on the fire, and if too thin stiffen your batch with some macaroon cocoanut.

CARAMEL CENTER FOR BUTTERCUPS

Cook in steam stirring kettle 4 lbs of corn syrup, 2 lbs of sugar, 4 lbs. of condensed milk , one-half lb. of Nuco butter, half pint of water. Cook this batch to stiff ball, or 245 degrees when tried in cold water.

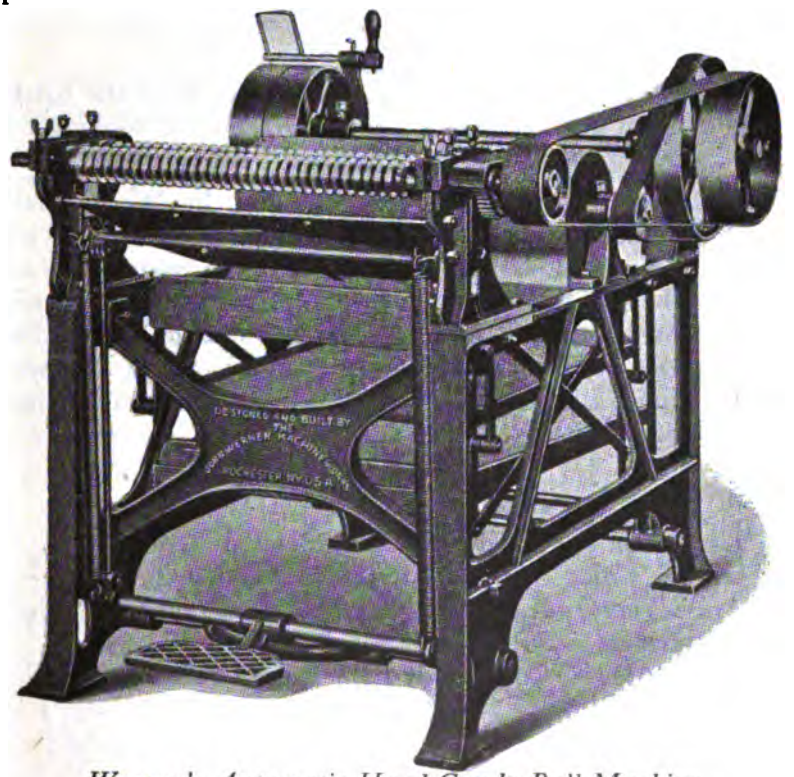
Pour out on a greased slab that is dusted good with flour, then let your batch cool enough so that you can handle it for your center. Before you pour your batch out on the slab add 1 ounce of vanilla flavor and ½ ounce of salt.

When handling caramel center for buttercups always have the caramel batch cooling on the slab before the jacket is poured out on the slab, as you can keep your center warm

by placing the caramel in a pan, and keep it on the heater on the spinning board.

Peanut Center Buttercups—Place 10 lbs. of peanut butter in a bon bon kettle and heat the peanut butter up so that it is warm, then add 2 ounces of salt and mix thoroughly through the butter. Now if your peanut butter is thin you can add some powder sugar to make the peanut butter have a stiff body, or if your peanut butter is dry, add some Nuco butter, and it works out smooth.

Mint-cuts or wine balls by the semi-automatic hard candy ball machine. Made by the use of corn syrup, in vacuum pan.



Werner's Automatic Hard Candy Ball Machine.

No wholesale house should be without this automatic hard candy machine who is specializing on hard goods. With this machine your hard goods department will be in position to specialize on jar goods, which finds a ready sale with the drug trade, and the small confectioner, when put up in small glass jars, and also sold in bulk as 10-lb. tins or 30-lb. tins, which will take with the jobbing trade.

During the hot months put up all your different mix made by the ball machine in small glass jars, and during the months from August to the holidays specialize on bulk goods, that is, 10 and 30-lb. tin containers.

Place in your melting kettle 100 lbs. of cane sugar, 30 lbs. of corn syrup, 4 gallons of water.

Cook this batch to 235 degrees. Then draw the batch into vacuum pan and finish like instructions for cooking on the vacuum pan.

In the manufacture of hard goods on the Werner ball machine, there is no limit to the different shapes and styles that can be turned out on this machine. The machine is so equipped as to handle cutters for work as small as five-sixteenths of an inch in diameter. In setting up the different batches, colors and flavors for striping the batches, always inlay all of the stripes so that they will not run or spread on the batch while spinning out.

DAINTY BALL MIX

Use lemon clear body, with white pulled inlaid stripes.

Orange Color—With white pulled inlaid stripes.

Anise Flavor—Color body red color, with white pulled inlaid stripes.

Wintergreen—Color body light green, with white inlaid stripes.

MINT CUTS FOR TIN PAILS

Flavor the body with mint flavor and pull the body white on the hook. Then have a piece colored a dark red for stripe, then inlay 6 red stripes around the batch, all the same distance apart, so that when they are cut on the ball machine the stripes will all look the same on the cuts.

TART BALL MIX

Make this mix in 5 colors, clear flavored lemon, and use 6 ounces of citric acid and 1 ounce of oil of lemon. Mix in on the cooling slab, then inlay with white pulled stripes.

Use this amount of citric acid and flavor to a 65-lb. batch.

FOR RASPBERRY TARTS

Make body a light red color, then mix 6 ounces of citric acid in, on the cooling slab, and add 1 ounce of flavor. Bebore coloring the body, pull a small piece for the white stripe that is to be inlaid on the batch.

FOR LIME TARTS

When the batch is cool enough to handle, pull a small piece for white stripe. Then color the body of the batch a light green color. Then add 6 ounces of citric acid and one-half ounce of oil of lime, on the slab, and mix thoroughly. Then, when the batch is cool enough to shape, inlay 6 white stripes.

ORANGE TARTS

When the batch is cool enough to handle, pull a small piece for white stripe. Then color the body of the batch a light orange, then add 6 ounces of citric acid and 1 ounce of orange flavor. Then, when cold enough to handle, inlay on the batch 6 white stripes.

CANDY SUCKERS MADE BY VACUUM WORK

The demand for candy suckers on sticks continues to grow

more and more every day, and from what I can see, there is a great future in store for the confectioners who specialize on candy suckers on sticks, with the present up-to-date method for turning out candy suckers by the use of the automatic sucker machine.

With the Racine automatic sucker machine this machine will turn out 80 candy suckers on stick every minute, and by using different rolls for the machine, you can make any variety designs or shapes, as the machine automatically inserts a stick in each piece of candy. With one or two of these machines in your hard goods department you will find that you can keep the hard goods men the year around, as this class of work can be turned out during the warmest weather if the candy suckers are wrapped. During cool months do not wrap them unless they are sold in the extreme south.

Racine Automatic Sucker Machine, Racine Machinery Co., Racine, Wis.

Formula for cooking candy suckers by continuous cooker. Packed 100 count in cartons, not wrapped:

Place in melting kettle 100 lbs. of sugar 33 lbs. of corn syrup, 4 gallons of water.

Cook to 232 degrees, then draw your batch into the cooker and finish like instructions for continuous cooker.

Make lemon clear with white stripes and flavor with 1 ounce of lemon to every 65-lb. batch and add 3 ounces of citric acid on the cooling slab.

Make raspberry red color, flavor with 1 ounce of raspberry and 3 ounces of citric acid.

Make mint a light green color, with white stripes. and flavor with one-half ounce of oil of mint.

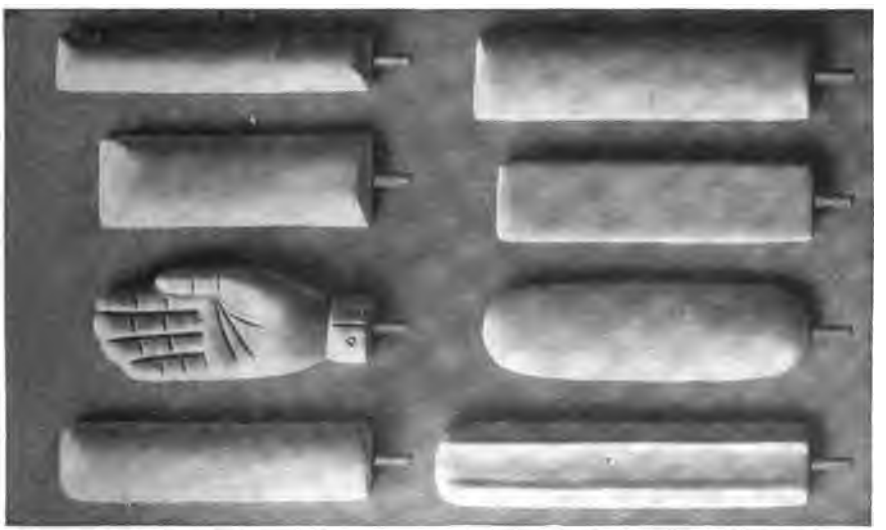
Formula for cooking candy suckers on the continuous cooker. Packed 100 count in cartons, wrapped in wax paper:

Place in melting kettle 100 lbs. of sugar, 50 lbs. of corn syrup, 3 gallons of water.

Cook to 232 degrees, then draw the batch into the cooker and finish like instructions for continuous cooker.

When this formula is used your goods should be pulled, which will make a very light piece of goods, and at the same time will stand up and not stick to wrappers.

Make these in different flavors and use different stripes for the different designs.



Candy Sucker Designs.

Formula for cooking candy suckers by vacuum pan:

Place in melting kettle 100 lbs. of sugar, 30 lbs of corn syrup, 4 gallons of water.

Cook to 235 degrees, then draw the batch into the vacuum pan and finish like instructions on vacuum pan work.

Packed 100 count in box, not wrapped.

Candy suckers by vacuum. Wrapped goods:

Place in melting kettle 100 lbs. of sugar, 50 lbs corn syrup, 3 gallons of water.

Cook to 235 degrees, then draw the batch into the vacuum pan and finish like instructions on vacuum work. All candy suckers with a great percentage of corn syrup should be pulled very light and barred good, so that the piece does not shrink when run through the sucker machine. For if the batch is pulled very light and not barred well the piece will not come out good, and the batch is hard to handle in feeding the machine.

Candy suckers made on the open fire. Not wrapped.

Place in a copper kettle 50 lbs. of sugar, 12 lbs. of corn syrup, 1½ gallons of water.

Place on a gas furnace and cook to 312 degrees for clear goods. For pulled goods cook to 310 degrees.

Candy suckers made on the open fire. Wrapped.

Place in a copper kettle 40 lbs. of sugar, 20 lbs. of corn syrup syrup, 1 gallon of water.

Cook to 300 degrees in cool weather and pull the batch light, on the hook. In hot weather cook to 310 degrees. Candy suckers made clear should not be wrapped. Pulled goods should be wrapped. They can be made in different

colors and flavors. Always get up something new in design, for which there is always a great demand. With the children, come out with something to represent the different holidays of the year, and the hard candy department will be kept busy the year around.

HOLIDAY MIX FOR THE FALL TRADE

ROCK CUT MIX

Pail goods. Cooked by continuous cooker.

Place in melting kettle 100 lbs. of sugar, 35 lbs of corn syrup, 3½ gallons of water.

Cook to 232 degrees, then draw the batch into the cooker and finish like instructions for continuous cooker.

As this work is all figure work of different designs, there is no limit to the assortment that a candy maker can turn out. You can make 10 different designs to a mix, or 40 different designs to a mix. As it would cover about 100 pages to go into the details of all the different designs and figures that are used in the manufacture of a complete assortment, I will only cover two or three different designs, and by following up these figures you will be in position to get an idea of how this work is turned out.

Strawberry Figure, or design in the center of the batch of candy—Now, regardless of whether the batch is made by vacuum pan, continuous cooker or open fire work, the batch is always laid up the same.

About 50 to 75 lbs. makes tbout the right size for batches, as it depends a great deal on how much table room you have to spin the batches out on.

Now as soon as the batch is out on the cooling slab, color one-quarter of the batch an orange color, for jacket, which must be kept warm in front of the heating board.

Then color about 1 lb. of the batch a green color, to rep-

resent the leaves and stems. Then take about 2 lbs. and color a dark red color. Then pull the rest of the batch on the hook just enough so that it is white. Then twist all the air from the batch while on the hook. Then place this pulled batch on the spinning board to keep warm, and the same with the red piece must be kept from getting cold, or you won't be able to work with it.

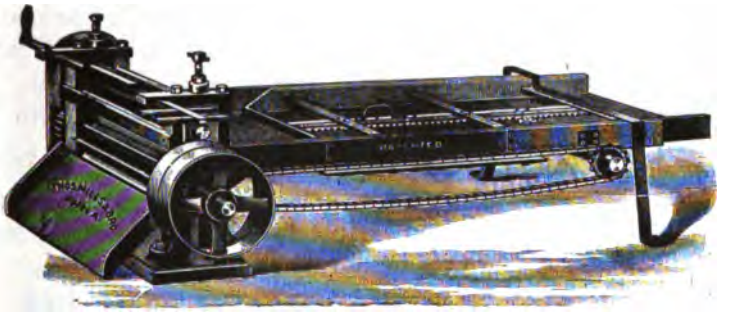
Now for representing the strawberry—Take the dark red piece and fold around a small piece of white for the center. Your white piece must be only one-fifth as large as the red piece of candy. Then roll round and stretch out the length of the table, or about 10 feet long. Then take your candy shears and cut out 10 sticks 1 foot long. Then lay 4 of these sticks side by side on the table in front of the heating board. Then place on top of these 4 sticks 3 sticks 1 foot long, then add your two sticks on top, then add the one stick. Now you have made a triangle shape piece. Then have the girl or boy helper to keep this triangle in this shape.

Now to make the green leaves and strawberry stem for strawberry figure.

Stem for Strawberry—Take and stretch out a thin piece of green one-half inch wide and very thin, and 1 foot long, the same as the red triangle piece. Then have two pieces of white as high as the green is wide, then put the thin green piece for stem between these two pieces of white, which must be the same length as the triangle piece.

Now for the Leaves for the Strawberry — Take and stretch a thin piece of green 2 feet long and 2 inches wide. Then take a small piece of the white that is rolled round, about the size of a lead pencil, and lay this round white piece in the middle of the green. Then fold the green over the round white piece. Then cut in the center with the candy shears, which will make two pieces 1 foot long. Then place one leaf on each side of the green stem. Then stretch out

a piece of white 1 inch thick and place on top of these green leaves. Now then, set your triangle-shaped piece in the center of your green stem and fill in the sides with the rest of the white batch and also on the bottom. Then fold your jacket around this white batch and spin out in round sticks one-half inch through, and as fast as you spin out the sticks the girl and boy helper should see that the sticks are kept round till the sticks are cold enough to hold their shape, for if you let your sticks get a flat side you have ruined the shape of your figure on the inside of your batch, which will show up when cut on rock cut machine.



Rock Cutting Machine.

ROSE FIGURE OR DESIGN IN THE CENTER OF BATCH OF CANDY

Now, as soon as your batch is poured out on the cooling slab, when your batch is cool enough to handle, flavor your batch with rose flavor or oil of anise. Now then, color one-fifth of your batch a dark red color for jacket. Then color about 1 lb. a green color, to be used for leaves and the stem.

Then take about 2 lbs. and color a deep brilliant rose color, and as soon as you get this piece colored take one-half of this piece and pull it a pink color on the hook, and twist out the air. Then flatten this piece out to about 4

inches wide and stretch out about 1 foot long. Then lay the red clear piece on top of the pulled pink piece and stretch to about 8 feet long. Then cut this piece into 8 pieces 1 foot long. Now then, start to build up the figure. Take and roll up one piece, then lap each piece as you turn each piece around, so by the time you have the 8 pieces used up you will have a round piece of candy 1 foot long. This piece is to represent the rose, or flower.

Now for the stem for the rose figure—Take and stretch out a thin piece of the green that has been kept warm, stretch this piece out very thin, and about 1½ inches wide and 1 foot long, the same length as the rose figure. Then make 2 pieces of white as high as the green is wide. Then place the green piece between the 2 pieces of white. This will represent the stem and these 2 pieces of white, with the green pieces between must be the length as the rose figure.

Now for the leaves—Take and stretch out a thin piece of green 2 inches wide and 2 feet long. Then take a small piece of white and lay in the middle of the green. The white piece must not be any larger than a round lead pencil. Then fold the green over the white round strip. Then cut this strip in the center with the candy shears. That will give you two pieces 1 foot long, which is to represent the leaves. Then place one leaf on each side of the white piece which contains the green stem. Then lay a flat piece of white on top of each green leaf. Then press the rose figure in between the two leaves so that the rose figure will touch the green stem. Then take the white, which must be kept warm, and fill in the sides with the white, and also the bottom. Then roll the batch round and flatten out the jacket so that it will go around the batch. Then spin out in sticks one-half inch through and cut on machine when cold.

LEMON ROCK CUT FIGURE

Flavor the batch with lemon as soon as the batch is cool enough to handle on the slab. Then color one-fifth of the batch a yellow color. Then pull about 10 lbs. of the batch white and twist out the air, and leave the rest of the batch clear.

Now when the clear part of the batch is cold enough to hold its shape, stretch this clear batch out about 2 feet long, then cut in two pieces. Then take a very small white piece and stripe one of these pieces with 4 white stripes on one side only. Then lay the other clear piece on top of white stripe piece so that the stripes will be in the center of the two clear pieces when placed together. That is to represent the seeds. Then take the white piece and stretch around the clear piece and shape the batch into a triangle shape. When you have stretched it into a triangle shape stretch it out 5 feet long. Then take a knife and cut into 5 pieces 1 foot long, which will give you 5 triangles. Then be sure and see that these triangles are kept in shape. Then take and place the 5 triangles side by side. Then take and roll the 5 triangles up together, and see that all the points meet together. Then roll the batch round, and fold the yellow jacket around the 5 triangles. Then spin out into sticks one-half inch through. The sticks must be rolled on the spinning table when spun out, until the sticks are cold, otherwise the figure in the batch will lose its shape, and then your figure is ruined.

For orange rock cut figure, color the jacket an orange color and flavor with orange flavor, then finish the same as with lemon rock cut figure.

RIBBON MIX CANDY FOR THE HOLIDAY TRADE

Cooked by the vacuum pan.

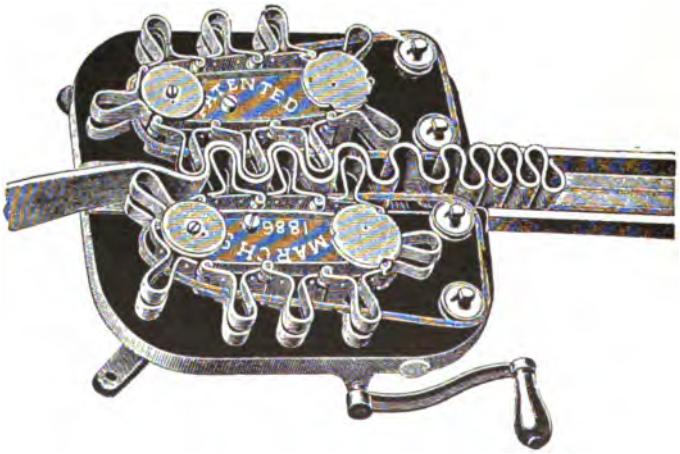
Place in the melting kettle 100 lbs. of sugar, 40 lbs. of

corn syrup, 3½ gallons of water.

Cook to 235 degrees in the melting kettle, then draw your batch into your vacuum pan and finish like instructions for vacuum work.

When your batch is cooked and poured out on the different cooling slabs for the 3 crews, then make your lemon clear with small white stripes, orange clear with small white stripes, anise red with small white stripes, wintergreen green color with white stripes, mints with small red stripes on the white pulled body; clove, pulled body, with a black and red border; cinnamon, pulled body white with a yellow jacket on only one side of your batch.

Then pack in pails or baskets in layers with wax paper between each layer.



Candy Ribbon Machine.

BROKEN TAFFY MIX FOR THE HOLIDAY TRADE

Cook by vacuum pan.

Place in the melting kettle 100 lbs. of sugar, 70 lbs. of

corn syrup, 3 gallons of water.

Cook to 235 degrees in the melting kettle. Then draw the batch into the vacuum pan and finish like instructions on vacuum pan work. For cooking broken mix on vacuum pan only pull a vacuum of 16 inches in place of 18 to 20 inches as for stick candy. If you have the pulling machine, pull all this class of work on the machine, so that your broken mix will be very light.

Make your assortment in white, yellow, orange, maple, pink, and stripe 3 of the batches that are pulled white with different colored stripes.

BROKEN TAFFY FOR THE HOLIDAY TRADE

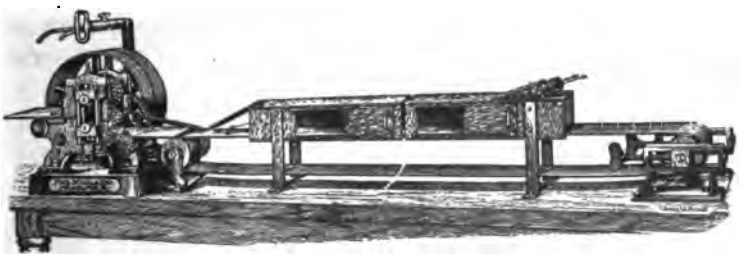
Cook by the open fire.

Cook in a copper kettle on gas furnace, 40 lbs. of sugar, 20 lbs of corn syrup, 1 gallon of water.

Cook to 285 degrees, then pour out on a greased slab and finish the same as for vacuum work in making the assortment.

HARD GOODS CENTERS FOR THE REVOLVING PANS

Made by the drop roll machine.



Drop Roll Machine.

Cook by vacuum work.

Place in the melting kettle 120 lbs. of sugar, 70 lbs. of corn syrup, 3 gallons of water.

Cook in the melting kettle to 235 degrees, then draw the batch into the vacuum pan. Then finish like instructions on vacuum pan work. Then pour the batch out on two cooling slabs that are greased. Then flavor and color according to the different goods wanted made. Now, on account of the great amount of corn syrup that is used in these centers for the pans, these centers should be taken care of as soon as they are run through the rolls, as if they are left to lay around for any length of time, they will get very sticky, where if they are given a wetting with gum and powdered sugar they will keep until they are ready to be run in the revolving pans.

For any wholesale manufacturer who has the vacuum pan, he can keep his hard goods department busy the year around by putting in the revolving pans, as there is no limit to the different varieties of specialties that can be turned out during the warm weather months, as pan goods will stand up all the year around, and they will always find a ready sale with the jobbing trade.

IMPERIAL ANISE DROPS

Color the batch a light red color, when it is cool enough to handle; then flavor the batch with anise flavor; then run out through the rolls; then finish up in the revolving pans a light brilliant rose color.

CINNAMON IMPERIAL DROPS

Leave the batch a clear color, then flavor the batch with cinnamon flavor, when cool enough to run through the rolls; then run up in the revolving pans and color a deep red for the finishing.

In making the imperial drop, use a very small, dainty drop.

ASSORTED FRUIT DROPS

Use a lemon drop roll. When your batch is cool enough to handle, leave the batch clear, then run these drops up in the pans in different colors and flavors.

Flavors to use for centers: Lemon centers, lemon flavor; lime centers, lime flavor; orange and raspberry, use 1 ounce of citric acid to every 25 lbs. of centers, and mix the acid in the batch when it is cool enough to handle on the slab.

Then run up in the revolving pans and finish the lemon in a yellow color, the orange a light orange color, the lime a light green color, the raspberry a red color.

CUPID MIX

When the batch is cool enough to handle leave the batch clear. Then use rolls of different designs that are very small. Then run through the drop roll machine. Make this assortment in 6 different kinds and flavors. They should be finished in the revolving pans in white, yellow, pink, green lavender and orange.

CANDY CHERRIES

Color the batch a light red color and flavor the batch with cherry flavor and use 1 ounce of citric acid to every 30 lbs. Then, when cool enough to handle, run through the drop roll machine, the size of a small lemon drop. Then finish them up in the pans a dark red color.

IMITATION JORDEN ALMONDS

When the batch is cool enough to handle, flavor the batch with oil of almond flavor; then pull the batch by pulling

machine or candy hook; then twist out the air and run through the rolls that have the almond shape design. Then finish them up in the revolving pans in white, pink, yellow and orange colors.

CANDY JAWBREAKERS

In place of using the caraway seed in starting the centers for jawbreakers, use a very small drop design on the drop roll machine, and leave the batch clear, and flavor according to the different colors, white lemon flavor, red anise flavor, black anise flavor, when they are finished up in the revolving pans.

CLOVE ASSORTMENT

Leave the batch clear, then when cool enough to handle run through a very small drop design on the drop machine. Then finish them in the revolving pans in white and pink, and flavor the center strong with oil of cloves when the batch is poured out on the slab.

SEA SHELL MIX

Make these shells in pulled and clear centers run through the drop machine, using a shell roll design. Then finish them in the revolving pan according to instructions on running up sea shell mix.

FOURTH OF JULY ASSORTMENT

Leave the center clear. When cool enough to handle run through the drop roll machine that has a small star design, then run these up in the revolving pans and finish in white, red and blue.

MENTHOL HOREHOUND COUGH DROPS FOR THE DRUG TRADE

Cook by vacuum work.

Place in the melting kettle 120 lbs. of sugar, 50 lbs. of corn syrup, 2 gallons strained horehound, 2 gallons water.

Cook to 235 degrees in the melting kettle, then draw the batch into the vacuum pan and finish like instructions for vacuum pan work.

For cooking the horehound herb, use 3 ounces of herb to 2 gallons of water, then cook to a boil, then let stand for 30 minutes, then strain through a very fine sieve; it is then ready to use. Now, when the batch is cooked in the vacuum pan and is poured out onto slabs that are greased, add 2 ounces of menthol crystals and mix thoroughly into the 2 batches. When cool enough to handle, run through the rolls in an oblong drop shape design, then finish in the revolving pans a very light maple color. These drops are very good sellers with the drug trade when put up in small packages, or they can be sold in bulk.

BLACK COUGH DROPS

Cook by vacuum work.

Place in the melting kettle 120 lbs. of sugar, 40 lbs. of corn syrup, 3 gallons of water, 1 gallon of horehound herb.

Cook to 235 degrees in the melting kettle, then draw the batch into the vacuum pan and finish like instructions for vacuum pan work.

For horehound herb, use 2 ounces of herb to the gallon of water. When the batch is cooked in the vacuum pan and poured out on the slabs, add 1 ounce of powdered charcoal, 1 ounce of oil of anise flavor, 3 ounces of powdered licorice, one-half ounce of oil of wintergreen, and mix these ingredients thoroughly into the batch. When cool enough to handle, run the batch through the drop roll machine,

with a drop design that you can use your trade mark on the drop. Then finish up in the revolving pans in a black color. Then pack in small cartons which can be sold to the drug trade for 10 cents per package.

HOREHOUND DROPS MADE WITH STICK CANDY SCRAP

Cook in the melting kettle 8 ounces of horehound herb with 4 fiallons of water, then, when the batch boils thoroughly, turn off the steam and strain the water from the herb through a very fine sieve. Now then, place this strained herb back into the melting kettle and add 20 lbs. of stick candy scrap that has been washed so that it does not contain any flour. Then turn on the steam and thoroughly dissolve the stick candy scrap, and as soon as the stick candy scrap is dissolved add 100 lbs of sugar, 35 lbs. of corn syrup and cook this batch in the melting kettle to 235 degrees; then draw the batch into the vacuum pan and finish like instructions for vacuum pan work.

When the batch is poured out on the slabs and is cool enough to handle, run the batch through the rolls, then finish up in the revolving pans in a light maple color.

During the cold weather months these drops can be sanded and sold to the trade in 10-lb. tin cans.

CARAMEL WORK

In the manufacture of caramel work for the wholesale trade, all this work should be turned out by the late stirring caramel steam kettles, also cutting machines, and the caramel wrapping machines.

You will find in this Candy Teacher all the very latest methods that are used in the manufacture of the different caramel specialties, as I have worked for the leading caramel houses of the United States. Now if you are going into

caramel work on a large scale, you should have made about 1 dozen iron frame trucks, that will hold 8 pans to a truck. These should be made so that each pan will have a frame on both sides, and only on one end of the pan. The other end of the pan should be left open for an end bar to be used when you pour the batch of caramel into the pans.

To cool the caramel work you should have a large air blower boxed in, and when the caramel work is poured in the pans and placed on the truck, you can run the truck with the caramel work in front of the air blower, which will cool the goods.

Now, in reference to cooking caramel work for chocolate coated work, never cook the caramel goods to a crack when tried in cold water. In testing caramel work never use ice water for testing a batch of caramels; use the water as it comes from the spigot, and do not let the water stand around for any length of time before using it for testing a batch of candy for caramels.

Caramel work for dipped goods should be cooked when tried in cold water to a hard ball only, and the caramel goods when spread out with the fingers when placed in the water the goods should not reach the cracking point, and in testing a batch of stand up caramels the goods should not reach the crack when placed in water. Caramel work that contains a great percentage of corn syrup should be cooked to the first crack when tried in water.

In testing caramel work by the water test so that you will know when your batch is cooked, if you have never tested caramel goods, use a stick for dipping out a little of the caramel goods, and I would advise you to always stop the stirrer of the caramel kettle when you reach into the kettle to get a test of caramel. In testing the caramel, as soon as you get a little of the caramel on the end of the stick, dip the caramel in some cold water, then, while it is in the water,

spread the caramel out like with your fingers into a sheet; then, when you bunch the caramel up like it will form a hard ball. Then you know that your batch is cooked high enough for dipped goods or stand up caramels.

For wrapped goods, cook it until it will crack when placed in the water when it is spread out into a sheet.

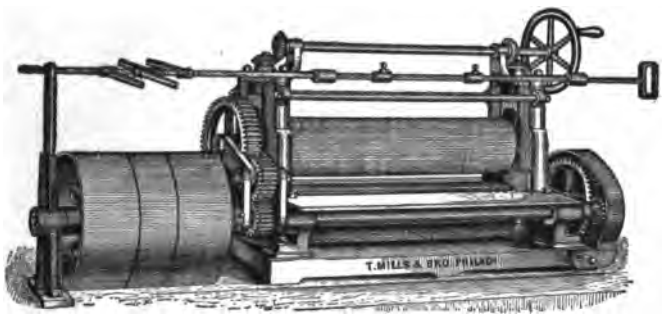
After you have tested a few batches of caramel work by the stick method, you will eventually become accustomed to the heat of the caramel, then you will be able to test it by dipping your hand into the batch and getting some of the caramel out with your fingers. Before dipping your hand into the hot caramel, or any candy, always first dip the hand down into the water, then into the hot candy. By dipping the hand in the water first the candy will not get a chance to stick to your fingers, where if you dip the hand down into the hot candy with a dry hand the candy will cling to your fiingers and hand, and your hand will get severely burned.

Battery of Cooking Kettles for Caramel Work.

WRAPPED PAIL CARMEL GOODS

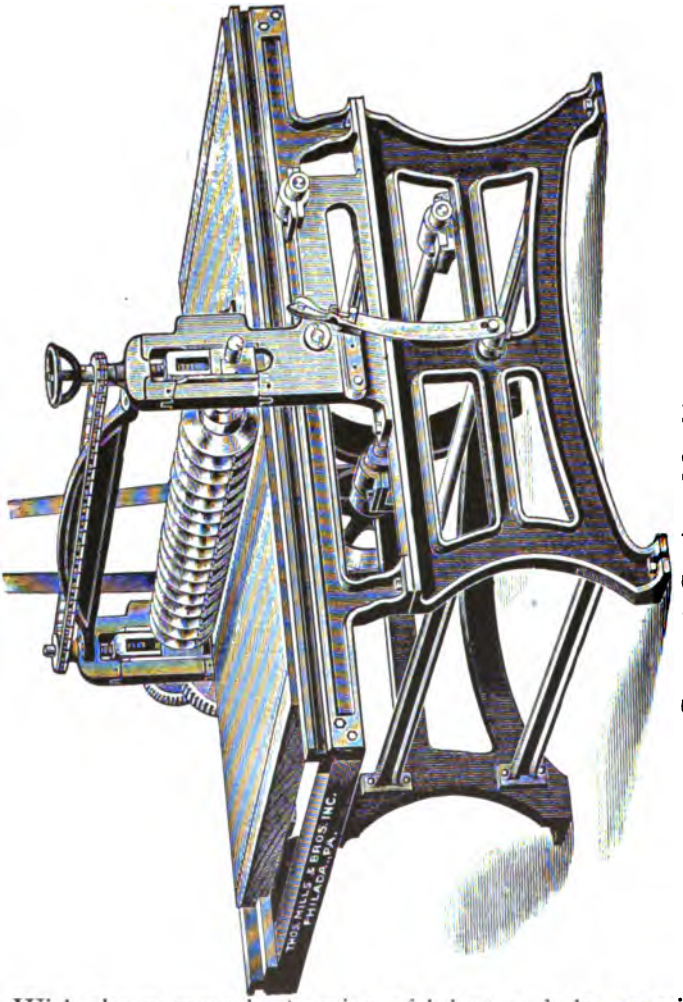
Place in your steam stirring kettle 50 lbs of corn syrup, 8 lbs. of flour, 20 lbs. of C sugar, 15 lbs. of condensed milk, 2 lbs. of Nuco butter.

Cook this batch to a very light crack when tried in cold water. Then add 2 ounces of vanilla flavor and 2 ounces of salt. Then pour out into your pans that are greased and dusted light with flour. Then place in front of blower to cool. Then, when cool enough to handle, size down with sizing machine.



Caramel Sizing Machine.

Then, after you have sized your batch, cut your pieces in about 1½ foot square; then run the piece through the cutting machine to be fed into the caramel wrapper.



Caramel Cutting Machine.

With the present high price of labor and the scarcity of girls who will take to wrap candy, I would advise any house that is selling to the jobbing trade to do all their wrapping by machines, as the Ideal Wrapping Machine Co., of Middletown, N. Y., has a caramel wrapper that has met the requirements of all the leading caramel houses of the country. The machine will wrap solid caramels, butterscotch caramel, pulled caramels and cutting the caramel from the

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strip, wrapping and delivering the caramels conveniently for packing, at such a low cost that it leaves no excuse for the wholesale manufacturer to wrap his caramels by the old method of hand wrapping.

Ideal Wrapping Machine. Ideal Wrapping Machine Co., Middletown, N. Y.

WRAPPED FINE BOX CARAMELS SOLD TO JOBBING TRADE

Cook in steam caramel stirring kettle 50 lbs. of corn syrup, 3 lbs. of flour, 18 lbs. of sugar, 25 lbs. of condensed milk, 3 lbs. of Nuco butter.

Cook to hard ball when tried in cold water, then add 3 ounces of vanilla flavor and 2 ounces of salt.

For chocolate caramel add 7 lbs. of liquor chocolate or cocoa powder. When your batch reaches a soft ball, then cook to hard ball when tried in cold water; then add 2 ounces of salt and 1 ounce of vanilla. Then pour out on cooling slab that is greased and dusted with flour. When cool

enough to handle, size and cut in strips; then wrap by caramel machine.

Packed in assorted flavors vanilla and chocolate in 5-lb. boxes.

CREAMED CENTER CARAMEL, WRAPPED

Soak over night 8 ounces of egg albumen in 1 pint of water. Now make cream center part.

Cook by steam kettle or open fire 5 lbs of sugar and 5 lbs. of corn syrup with 1 quart of water. Cook to 260 degrees.

Now, while your batch is cooking, place into your nougat beater 2 lbs. of corn syrup with your dissolved egg albumen and beat up very light, then add your batch that is cooked to 260 degrees and beat this batch up very stiff.

Now, while this batch is beating, place in your kettle and cook by steam or fire 8 lbs. of corn syrup and 5 lbs. of sugar, with 1 quart of water, and cook this batch to 262 degrees; then pour this batch into your batch that is beaten up stiff; then add 1½ lbs of Nuco butter and mix, then add 1 lb. of fondant cream and 1 ounce of vanilla flavor; then pour your batch out on a greased slab that is dusted light with flour; then spread the batch out so that it will be one-half inch thick. Now, while this batch is is cooling on the slab, cook your caramel part for top and bottom.

Place in the caramel kettle 50 lbs. of corn syrup, 3 lbs. of flour, 25 lbs. of sugar 25 lbs. of condensed milk, 3 lbs of Nuco butter.

Cook this caramel batch to a hard ball when tried in cold water, then add 2 ounces of vanilla and 2 ounces of salt.

Pour out on a slab that is greased and as soon as the caramel batch is cold enough to size down take half of the batch and size down for the top of your nougat; then size the other half for the bottom part; then let stand until it is ready to be sized down; then size down to five-eighths of an inch; then cut in strips for the caramel wrapping machine; then pack in pails or boxes.

WRAPPED BUTTER CARAMEL FOR BOX GOODS

Cook by caramel kettle 40 lbs. of corn syrup, 25 lbs of

sugar, 3 lbs of flour, 20 lbs. of condensed milk, 2 lbs. of butter, 2 lbs. of Nuco butter.

Cook to hard ball when tried in cold water, then add 2 ounces of vanilla flavor and 4 ounces of salt, then pour out on a greased slab; then, when cool enough to handle, size down and cut in strips, then wrap in yellow wrappers on the caramel machine.

WRAPPED PULLED CARAMEL

Pulled part for center.

Place in steam jacket stirring kettle 50 lbs. of corn syrup, 42 lbs. of sugar, with 1 lb. of flour, 2 lbs. of Nuco butter and one-half gallon of water. Cook to a very light crack when tried in cold water. Then pour out on a greased slab and when cold enough to handle flavor with 1 ounce of vanilla flavor and pull very light on pulling machine.

Caramel part for top and bottom:

Cook by steam stirring kettle 25 lbs. of corn syrup, 14 lbs. of sugar, 1 lb. of flour, 12 lbs. of condensed milk, 2 lbs. of Nuco butter. Cook to a hard ball when tried in cold water, then add 2 ounces of vanilla flavor, then pour out on a greased slab; then, when cold enough to handle, size down and take half of this caramel for the top of the pulled batch, and the other part of the caramel for the bottom of the pulled batch; then size down to five-eighths inch thick; then cut into strips for caramel wrapping machine.

WRAPPED CREAMED CARAMELS

Cook by steam stirring kettle 50 lbs. of corn syrup, 45 lbs of sugar, 1 lb. of flour, 2 lbs. of Nuco butter, one-half gallon of water.

Cook to a light crack when tried in cold water, or 255 degrees. Then add 2 ounces of vanilla flavor, then pour the batch out on a greased slab that is dusted well with flour. Then, when the batch is cool enough to handle, pull the batch well on the pulling machine. Then, while the batch is on the machine add 2 lbs of special nougat fondant. Then pull the batch very light; then, when the batch is cold enough to size down, make your caramel 1 inch square and five-eighths inch thick.

WRAPPED PLANTATION CARAMELS

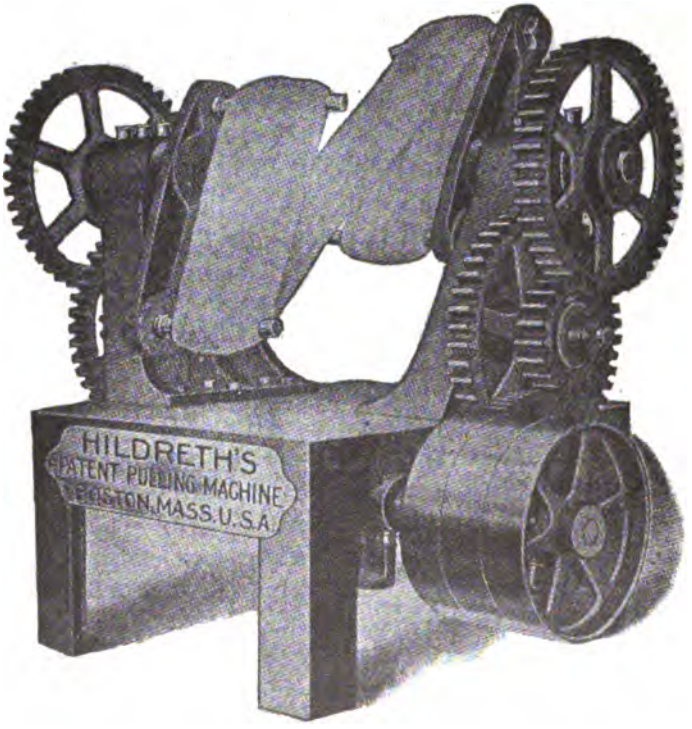
Cook by steam stirring kettle 50 lbs. of corn syrup, 20 lbs. of sugar 12 lbs of molasses, 4 lbs. of flour, 20 lbs. of condensed milk, 3 lbs. of Nuco butter.

Cook to a light crack when tried in cold water, then add 2 ounces of salt and 2 ounces of vanilla flavor, then pour out on a greased slab that is dusted well with flour. When cold enough to handle, size down to three-eighths inch thick and cut in strips seven-eighths inch wide; then wrap in yellow wax wrappers.

PLANTATION SPONGE CARAMELS, WRAPPED

Cook in steam stirring kettle 50 lbs. of corn syrup, 25 lbs. of sugar, 15 lbs. of molasses, 2 lbs. of flour, 2 lbs of Nuco butter.

Cook to a light crack when tried in cold water, then add 2 ounces of vanilla flavor, 1 ounce of salt. Then pour out on a greased slab that is dusted well with flour; then add on the slab 2 ounces of soda and fold up the batch; then, when cool enough to handle, pull the batch well by pulling machine, then size down to five-eighths inch thick and cut in strips seven-eighths inch wide; then wrap in yellow wax paper on the wrapping machine.



Pulling Machine. H. L. Hildreth Co., Boston, Mass.

FAVORITE MILK CARAMEL

Place in a steam stirring kettle 50 lbs. of corn syrup, 25 lbs. of sugar, 20 lbs. of molasses, 3 lbs. of flour, 3 lbs. of Nuco butter, 10 lbs. of condensed milk.

Cook the batch to a light crack when tried in cold water, or 256 degrees. Then pour out on a greased slab that is dusted with flour; then add 1 ounce of vanilla flavor and 1½ ounces of salt; then mix the vanilla and salt in the batch; then, when cold enough to handle, pull on the pulling machine very light. Then size down to five-eighths inch thick; then cut into strips seven-eighths inch wide. Then wrap on wrapping machine in yellow wax paper and pack in 5-lb. boxes.

CARAMEL BUTTER TOFFEE, WRAPPED

Cook by steam stirring kettle 50 lbs. of corn syrup, 30 lbs. of sugar, 20 lbs. of condensed milk, 4 lbs. of creamery butter, 3 lbs. of Nuco butter, 1 lb. of flour.

Cook to a light crack when tried in cold water, then add 2 ounces of vanilla flavor and 6 ounces of salt and one-quarter teaspoon of oil of lemon. Pour out on a greased slab that is dusted with flour; then, when the batch is cool enough to handle, size down to three-eighths inch thick, then cut in strips seven-eighths inch wide and wrap by machine with yellow wrappers.

This caramel toffee should be put up in tin boxes that will hold 10 lbs., and this package will find a ready sale with the jobbing trade and will keep for 6 months.

LICORICE FLAVOR CARAMEL WRAPPED—No. 1

Cook by steam jacket stirring kettle. Place 3 lbs. of licorice block in steam kettle with one-half gallon of water and dissolve the licorice by cooking. Then add 50 lbs. of corn syrup and 3 lbs. of flour and mix thoroughly, then add

30 lbs. of sugar, 25 lbs. of condensed milk, 2½ lbs. of Nuco butter. Cook the batch to a hard ball when tried in cold water, then add 1 ounce of anise flavor and color the batch with Velvetine black, then pour out on a greased slab that is dusted with flour; then, when cool size down to five-eighths inch thick, then cut in strips for caramel wrapping machine, then wrap by the machine in white wrappers. Then pack in 5-lb. boxes or half pails.

LICORICE FLAVOR CARAMEL, WRAPPED—No. 2

Cook by steam jacket stirring kettle. Dissolve 3 lbs of licorice block in one-half gallon of water by cooking. Then add 40 lbs. of assorted scrap, caramel scrap of any kind, with 1 gallon of water; then cook until the scrap is melted, then start the stirrer going and add 10 lbs. of corn syrup, 25 lbs. of condensed milk, 3 lbs. of flour, 2½ lbs. of Nuco butter. Cook the batch to a hard ball when tried in cold water, then add 1 ounce of anise flavor and color with Velvetine black color.

LICORICE FLAVOR CARAMEL, UNWRAPPED

Cook by steam stirring kettle. Dissolve 3 lbs. of licorice block in one-half gallon of water. Then add 10 lbs. of corn syrup, 10 lbs. of sugar, 2 lbs. of Nuco butter, 20 lbs. of condensed milk. Cook to a hard ball when tried in cold water, then add one-half ounce of anise flavor and color with Velvetine black, then pour out on a greased slab, with five-eighths inch rods; then, when cool, cut in squares by caramel cutting machine.

SOCIAL CARAMELS, WRAPPED

Cook by steam stirring kettle 60 lbs. of corn syrup, 40 lbs. of sugar, 2½ lbs. of flour, 3 lbs. of Nuco butter.

Cook the batch to a light crack when tried in cold water,

then add 2 ounces of vanilla flavor, then pour the batch out on a greased slab that is dusted with flour. Then, when cold enough to handle, take two-thirds of the batch and pull very light and white, then color the rest of the batch a pink color and pull this batch very light.. Then place the pink part in between the white top and white bottom; then size down to five-eighths inch thick; then cut in squares five-eighths inch square; then wrap by machine in white wax papers.

CARAMEL BUTTER DAINTIES

Pack in 10-lbs. tin boxes.

Cook by steam stirring kettle 50 lbs. of corn syrup, 30 lbs. of C sugar, 3 lbs. of creamery butter, 2 lbs. of Nuco butter and 2 lbs. of flour.

Cook the batch to a light crack when tried in cold water, then add 2 ounces of vanilla flavor and 3 ounces of salt; then mix thoroughly; then pour out on a greased slab that is dusted with flour; then, when cool enough to handle size down to five-eighths inch thick, then cut into strips five-eighths inch wide and wrap in yellow wax wrappers by the wrapping machine. This piece will make a very good jobbing piece.

UNWRAPPED STAND UP CARAMELS, VANILLA PLAIN

Cook by steam stirring kettle 16 lbs. of corn syrup, 16 lbs. of sugar, 2 gallons of 20 per cent cream, 21 lbs. of condensed milk, 3 lbs. of Nuco butter.

Cook the batch to a hard ball when tried in cold water; then add 2 ounces of vanilla flavor and 2 ounces of salt; then pour the batch out on a greased slab that is cold; then, when the batch is cool enough to handle, cut on caramel machine and pack in stand up dividers, and use wax divid-

ers between each layer; then pack 5 lbs. to a box. This caramel is sold to the high class retail trade.

For vanilla nut stand up caramels add 6 lbs. of almonds.

For raspberry stand up caramels add 3 ounces of raspberry flavor and 1 ounce of citric acid, after the batch is cooked. Then color the batch a red color.

CHOCOLATE STAND UP CARAMEL

Cook in a steam stirring kettle 16 lbs. of corn syrup, 15 lbs. of sugar, 2 gallons of 20 per cent cream, 3 lbs. of Nuco butter, 20 lbs. of condensed milk.

Cook the batch to a soft ball, then add 8 lbs. of liquor chocolate, or cocoa powder; then cook the batch to a stiff ball when tried in cold water, then add 2 ounces of vanilla flavor and 2 ounces of salt.

For chocolate nut stand up caramel add 6 lbs. of almonds.

VANILLA AND CHOCOLATE STAND UP CARAMELS

Cook by steam stirring kettle 20 lbs. of corn syrup, 20 lbs. of sugar, 40 lbs of condensed milk, 4 lbs of Nuco butter.

Cook the batch to a hard ball when tried in cold water, then add 3 ounces of vanilla flavor and 2 ounces of salt. Pour out on a greased slab, and when the batch is cool enough to handle, cut on caramel machine; then pack in stand up dividers in a 1 lb. box, to be sold to the high class retail trade.

CREAM CENTER STAND UP CARAMEL

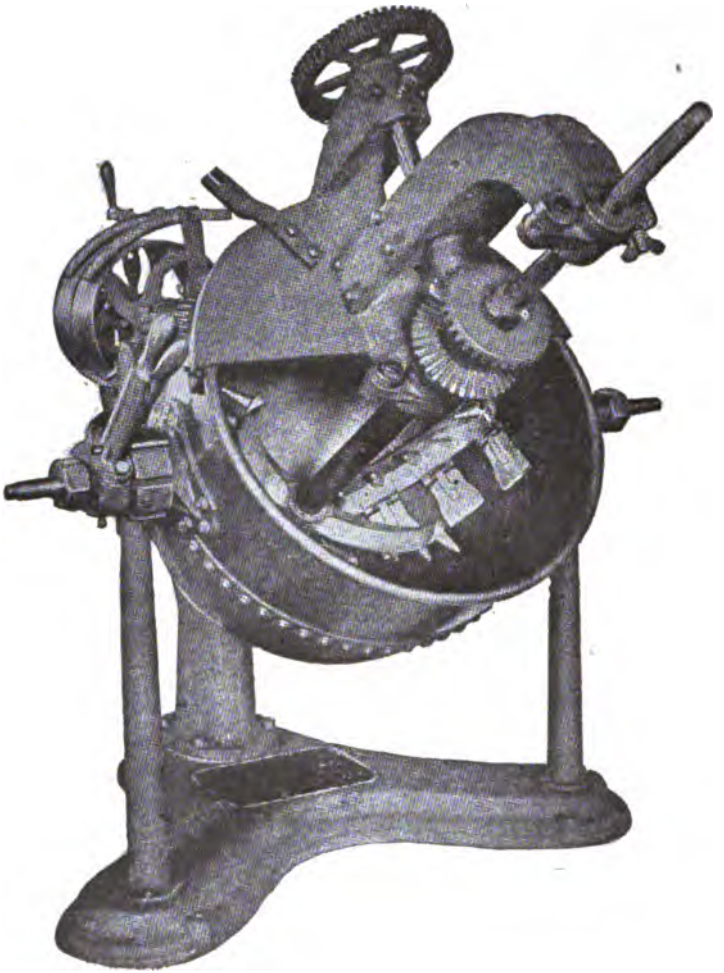
Center for caramel: Soak over night 6 ounces of egg albumen in 1 pint of water; then, when your egg albumen is

thoroughly dissolved, next morning, place the dissolved egg in your nougat beating machine with 1 lb. of special nougat fondant and beat this egg up very light. While this egg is beating cook by steam or open fire, 4 lbs. of sugar, 4 lbs. of corn syrup, with 1½ pint of water. Cook this batch to 260 degrees, then pour this cooked syrup into the beaten egg and beat up very light and stiff.

Now cook part 2 on the fire, or by steam kettle, 6 lbs. of sugar and 6 lbs. of corn syrup, with 1 quart of water. Cook this batch to 260 degrees, then pour this cooked syrup into the first batch that is beaten up, and mix thoroughly; then add 1 lb. of Nuco butter and one-half lb. of fondant cream and mix thoroughly; then add 1 ounce of vanilla flavor. Pour out on a greased slab that is dusted with flour and spread the batch out so that it will be about half an inch thick.

CARAMEL PART

Cook by steam stirring kettle 8 lbs. of sugar, 8 lbs. of corn syrup, 15 lbs. of condensed milk, 2½ lbs. of Nuco butter. Cook to a stiff ball when tried in cold water, then pour out on a greased slab; then, when the batch is cool enough to handle, size down half of the batch for the top, and the other half of the batch for the bottom; then let stand so that the top and bottom stick to the center; then size down to five-eighths inch thick; then cut on caramel cutting machine and pack in 1 lb box with stand up dividers. The box should only contain 1 layer of caramels to the box.



Caramel Cooking Kettle.

CHOCOLATE COVERED CARAMELS FOR THE ENROBER MACHINE—PAIL GOODS

Cook by steam stirring kettle 50 lbs. of corn syrup, 25

lbs. of sugar, 20 lbs. of condensed milk, 5 lbs. of flour, 3 lbs. of Nuco butter. Cook to a hard ball when tried in cold water, then add 3 ounces of vanilla flavor and 2 ounces of salt. Pour out on a greased slab that is dusted with flour; then, when cool enough to handle, size down, and cut by caramel cutting machine; then dip in thin chocolate by the enrober dipping machine. When dry, pack in pails with tray circles.

PAIL GOODS

Cook by steam stirring kettle 25 lbs. of corn syrup, 10 lbs. of sugar, 15 lbs. of assorted scrap that is washed and strained, 2 lbs. of flour, 2½ lbs. of Nuco butter, 25 lbs. of condensed milk.

Cook the batch to a stiff ball when tried in cold water; add 3 ounces of vanilla flavor and 2 ounces of salt. Pour out on a greased slab to cool. When cold, cut in caramels, then dip by machine.

BOX GOODS

Cook by steam stirring kettle 25 lbs. of corn syrup, 15 lbs. of sugar, 2 lbs. of Nuco butter, 2 lbs. of flour, 25 lbs. of condensed milk. Cook the batch to a hard ball when tried in cold water. Then add 3 ounces of vanilla flavor and 2 ounces of salt; then pour out on a greased slab; then, when cold, cut into caramels and dip by enrober dipping machine.

BOX GOODS DIPPED IN VANILLA AND MILK COATING

Cook by steam stirring kettle 20 lbs. of corn syrup, 14 lbs. of sugar, 18 lbs. of condensed milk, 1 lb of ffour, 2 lbs. of Nuco butter.

Cook the batch to a stiff ball when tried in cold water,

then add 8 lbs. of ground pecans or almonds; then add 3 ounces of vanilla flavor and 2 ounces of salt. Pour out on a greased slab. When cool enough to handle, size down and cut on caramel cutting machine; then dip in milk coating, or a light vanilla coating. To be used for fancy box goods.

NO. 1 CARAMEL FOR FANCY BOX GOODS

Cook by steam stirring kettle 25 lbs. of corn syrup, 15 lbs. of sugar, 20 lbs of condensed milk, 3 lbs. of Nuco butter, 1 lb. of creamery butter, 1 lb. of flour. Cook the batch to a stiff ball when tried in cold water. Then add 3 ounces of vanilla flavor, 2 ounces of salt and one-quarter teaspoon of oil of lemon flavor; then pour the batch out on a greased slab. When cold cut in oblong shape on caramel cutting machine, then dip by hand in a dark vanilla coating.

CHOCOLATE DIPPED FIG CARAMEL

Cook by steam stirring kettle 30 lbs. of corn syrup, 15 lbs. of sugar, 15 lbs. of condensed milk, 2 lbs. of Nuco butter. Cook the batch to a stiff ball only, when tried in cold water. Then add 6 lbs. of ground figs, then add 5 lbs. of fine cocoanut and 2 ounces of vanilla. Then pour the batch out on a greased slab that is dusted with flour. Then, when cool enough to be handled, size down and cut on caramel cutting machine.

CARAMEL PECAN SWEETS

Cook by steam stirring kettle 15 lbs. of corn sprup, 8 lbs of sugar, 12 lbs of condensed milk, 2 lbs of Nuco butter. Cook the batch to a stiff ball when tested in cold water, or 246 degrees; then add 8 lbs. of ground pecans, 2 ounces of vanilla flavor and 2 ounces of salt. Then pour the batch out on a greased slab that is dusted with flour; then, when cool enough to handle, size down to one-half inch thick and five-eighths inch squares; then dip in a dark vanilla sweet

WRAPPED KISSES FOR THE JOBBING TRADE

The candy wrapped kisses are one of the staple articles that are manufactured and sold to the jobbing trade, and any wholesale manufacturer can build up a great business coating.

on the different varieties of candy kisses which this Candy Teacher contains. By using the latest methods for turning out the wrapped kisses with the steam kettles, pulling machines and wrapping machines, you have a great advantage over the old method for manufacturing a variety of candy kisses for the jobbing trade.

Think of what advantage it gives you in specializing on candy kisses, something that will stand up 12 months of the year, and which will always find a ready sale with the public. All the up-to-date manufacturing confectioners are wrapping their kisses by the kiss wrapping machine, as this machine will save the manufacturer at least 1 cent a pound over hand wrapping, and the machine wraps the kisses neat and tight, so that the kisses are better protected from the damp atmosphere, which is one great advantage the machine wrapping has over hand wrapping.

MOLASSES CHEWING CANDY KISSES

Cook by steam stirring kettle 50 lbs. of corn syrup, 35 lbs. of sugar (Southern), 15 lbs. of molasses, 2 lbs. of flour, 1 lb. of butter, 1 lb. of Nuco butter, 8 lbs. of caramel paste or condensed milk.

Cook the batch to a light crack when tried in cold water. Then add 3 ounces of vanilla flavor; add 2½ ounces of salt. Pour out on a greased slab that is dusted well with flour; then, when your batch is cool enough to handle, pull on machine, and pull the batch very light. Then, after your batch is pulled, take from the machine and let cool on the

slab until your batch is cool enough to keep its shape to spin out, then wrap on the wrapping machine.

Model K Kiss Wrapping Machine, by Package Machinery Co., Springfield, Mass.

SOCIETY WRAPPED KISSES

Cook in caramel stirring kettle 50 lbs. of corn syrup, 30 lbs. of sugar, 5 lbs. of molasses, 1 lb. of butter, 1 lb. of Nuco butter, 10 lbs. of condensed milk.

Cook to a light crack when tried in cold water. Then add 2 ounces vanilla flavor and 2 ounces of salt. Pour on a cold slab that is greased and dusted with flour; then, when your batch is cold enough to handle, pull very light on the machine. Then take the batch from the pulling machine and place on the slab to cool. When cold enough so that it will hold its shape, spin out and wrap by wrapping machine.

SALT WATER TAFFY KISSES

Cook by steam kettle 30 lbs. corn syrup, 20 lbs. sugar, 1 quart of water, 1 lb. of flour, 1 lb. of butter, 1 lb. of Nuco butter.

Cook to light crack when tried in cold water. Then add 2 ounces of vanilla flavor; then pour out on a greased slab; then, when the batch is cool enough to fold up, add 4 ounces of salt and fold in the batch. Then let the batch cool enough so that it will stay on the machine, as the colder you pull the batch on the pulling machine, tthe quicker the machine will get the air into the batch, and the better shape the batch will keep spinning out for the wrapping machine. Wrap these kisses in white, pink and yellow wrappers.

FRUIT WRAPPED KISSES

Cook in steam stirring kettle 20 lbs of corn syrup, 15 lbs. of sugar, 1 lb. of flour, 1 lb. of Nuco butter, 1 quart of water.

Cook to a light crack when tried in cold water. Then add 2 ounces of Vanilla. Pour out on a greased slab dusted with flour; then, when the batch is cool enough, pull very white and light on the machine. Then take from the pulling machine and let cool on the slab. Now take 10 lbs. of the batch and mix in 2 lbs. of ground glaze cherries. Then let this batch get cold enough so that it will hold its shape, then wrap the rest of the batch around this fruit center; then spin out and wrap by machine. Wrap these kisses in pink wrappers.

PEANUT BUTTER WRAPPED KISSES

Cook in steam kettle 20 lbs. of corn syrup, 15 lbs. sugar, 1 lb. flour, 1 lb Nuco butter, 5 lbs. molasses, 5 lbs. condensed milk.

Cook to light crack when tried in cold water, or 258

degrees. Pour out on a greased slab, and as the batch gets cold, add 2 ounces of salt and fold up. Then, when it is cool enough to handle, pull on the machine, and then cool on the slab and bar all the air from the batch. Then take 5 lbs of peanut butter and add 2 ounces of salt and mix in; then stiffen the peanut butter up with powder sugar so that it will have a stiff body; then mix in 1 ounce of nutmeg. Now then, take the pulled batch and wrap around the peanut center and close both ends; then spin out and cut and wrap in brown wax paper.

ATLANTIC KISSES

Cook by steam kettle 20 lbs. of corn syrup, 12 lbs. of sugar, 1 quart of water, 6 ounces of flour, 8 ounces of Nuco butter, 2 lbs. condensed milk.

Cook to a light crack, or 257 degrees. Then add 1 ounce of vanilla flavor and pour out on a greased slab, and when cold enough, pull very light on machine, and when the batch is pulled enough, take half of the batch from the pulling machine, and then color the rest on the machine a light pink color and flavor with one-half ounce of strawberry flavor and pull very light. Then take the batches, when cold enough so that they will hold their shape, lay one batch on top of the other; then shape the batch round; Then spin out and cut and wrap on machine in white wrappers.

PECAN SPONGE KISSES

Cook in steam kettle 30 lbs. of corn syrup, 20 lbs. sugar, 1 lb. Nuco butter, 1 lb. flour, 1 quart water.

Cook to good crack when tried in cold water, or 260 degrees by gauge. Then pour out on greased slab dusted heavy with flour. Then, when cool enough to fold up, add 2 lbs. of special nougat fondant and fold in as the batch

gets cold, then flavor with 1 ounce of vanilla flavor and pull very light and white on pulling machine. Then bar all the air from the batch on the slab. Then, when the batch will hold its shape, take 10 lbs. of the batch and mix in 1½ lbs. of ground pecans. Then wrap the rest of the batch around this nut center batch and spin out and cut and wrap by machine in pink and white wrappers.

MAPLE WALNUT KISSES

Cook in steam kettle 45 lbs. of corn syrup, 25 lbs. Southern sugar, 9 lbs. maple sugar, 2 lbs. Nuco butter, 8 lbs. of condensed milk, 1 quart of water, 1 lb. of flour.

Cook to 256 degrees, or light crack when tried in cold water. Then pour out on a greased slab. Then grind 3 lbs. of black walnuts fine in food chopper. Then, when the batch is cool enough, pull very light on machine. Then cool and bar the batch on the slab. Now then, take 10 lbs. of the batch and mix in the ground walnuts; then fold the rest of the batch around this center batch and spin out and cut and wrap by machine in white and brown papers.

PAN TAFFY FOR THE RETAIL TRADE

Cook by steam kettle 15 lbs. of sugar, 12 lbs. of corn syrup, one-half gallon of water, 1 lb. Nuco butter, 6 ounces of flour and 1 quart of 20 per cent cream, and cook to 260 degrees. Then add 1 ounce of vanilla flavor and one-half ounce of salt. Then pour out on a greased cold slab and fold up the edges, and when cool enough pull by machine very light. Then dust the spinning table with powder sugar and stretch out very thin, about one-half an inch thick. Then cut to fit the pans, or tin trays, and line the trays with heavy wax paper. Then pack in 5 tin trays to a case.

STRAWBERRY PAN TAFFY

Cook by steam kettle 15 lbs. of sugar, 11 lbs. of corn

syrup, 1 quart of water, 1 lb. of Nuco butter, 5 ounces of flour, 2 lbs. of condensed milk.

Cook to 260 degrees, or a crack when tried in cold water. Pour out on a greased cold slab, and when cold enough to handle, pull on machine very light, and color the batch a light pink color, and flavor with one-half ounce of citric acid and 1 ounce of strawberry flavor.

MOLASSES FILBERT TAFFY

Cook in steam kettle 15 lbs. of sugar, 12 lbs. of corn syrup, 1 lb of Nuco butter, 4 lbs. of molasses, 5 ounces of flour, 2 lbs of condensed milk.

Cook to 260 degrees, or a crack when tried in cold water. Then add 2 ounces of vanilla flavor and 2 ounces of salt. Pour out on a greased cold slab. When cold enough to handle, pull well on machine. Then take from the machine and mix in on the slab 2 lbs. of filberts that are ground coarse. Then stretch out in sheets to fit the pans.

BLACK WALNUT TAFFY

Cook in steam kettle 20 lbs. of sugar, 18 lbs. of corn syrup, 1½ quarts of water, 3 ounces of flour, 1½ lbs. Nuco butter.

Cook to 260 degrees, or a crack when tried in cold water. Pour out on a greased cold slab, and when cold enough to handle, pull on the machine very light. Now, while the machine is pulling the batch, add 1 lb of special nougat fondant and 1 ounce of vanilla flavor. Then let the batch cool on the slab and mix into the batch 3 lbs. of black walnuts, then stretch out in thin sheets, then cut the size of the pans.

CHOCOLATE PAN TAFFY

Cook by steam kettle 15 lbs. of sugar, 14 lbs. of corn syrup, 1 quart of water, 1 lb. of Nuco butter, 2 ounces of

flour. Cook to a crack when tried in cold water, or 258 degrees, then add 2 ounces of vanilla flavor and pour out on a cold greased slab. Then add on the batch while hot on the slab, 2 lbs. of liquor chocolate, cut up fine. Then fold in the edges and fold the chocolate up into the batch; then, when cold enough, pull on the machine; then stretch out thin and cut the size of the pans.

ATLANTIC CITY STYLE TAFFY

Cook in steam kettle 20 lbs. of sugar, 17 lbs of corn syrup, 1 lb. of Nuco butter, 1½ quarts of water, 2 ounces of flour.

Cook to 260 degrees and then add one-half lb. of butter and cook to 259 degrees, or a crack when tried in cold water; then add 1 ounce of vanilla flavor. Pour out on a cold greased slab, and when cold enough to fold up, add 3 ounces of salt. When cold enough, pull on machine and stretch out thin and cut for the counter pans.

Make this style of taffy in vanilla and strawberry flavors.

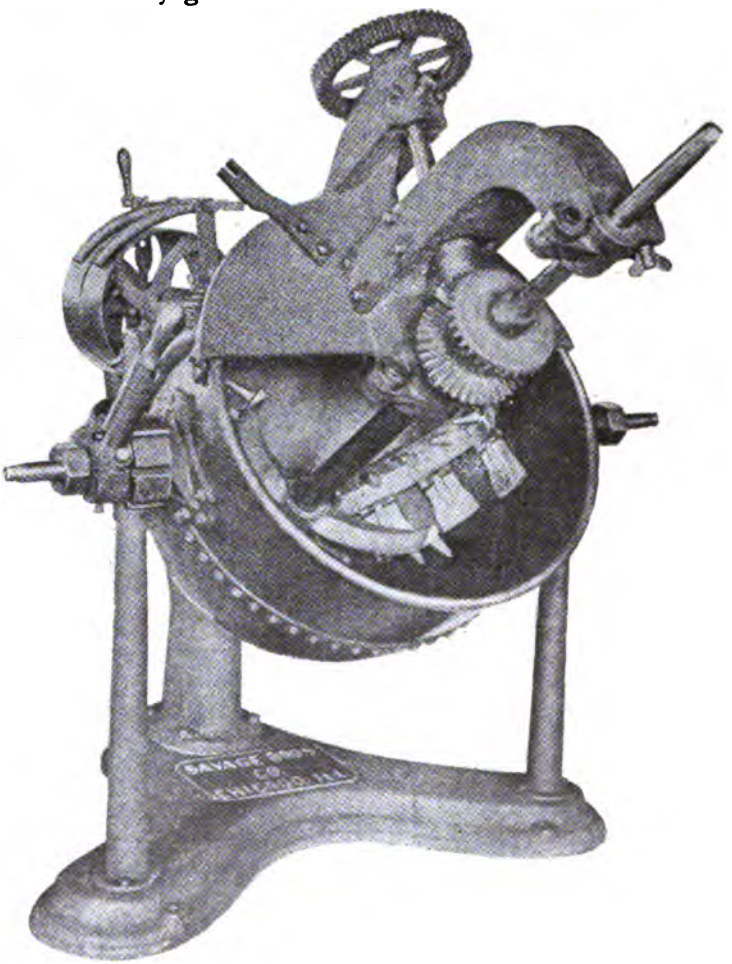
FUDGE SPECIALTIES

In the manufacture of fudge specialties, as case goods, bar goods of any kind, the fudge department should have from 12 to 48 wooden trays to use to pour the fudge on, as when you use the marble slabs to pour the goods out on, the fudge work will never set the same, and you will not have much of success in the manufacture of fudge specialties.

You should have a wooden rack made that will hold from 12 to 24 trays, and they can be made oblong or square. They should be made of one-half inch lumber, so that they are not too heavy to handle. As all the heavy wax paper comes 24x36, you should make the trays so that the standard size of paper will fit the trays, so there will be no waste in wax paper, and use nothing but the heavy wax paper in fudge work.

In cooking fudge work, cook the batches by trying the fudge in cold water. The way to test a batch of fudge

work is, dip your hand in cold water first, and always stop the stirrer before dipping your hand into the batch of candy. Then dip down quick and pick up a little of the batch on one or two of your fingers, then dip into the pail of cold water, and then you can tell just how hard the candy will be, as the cold water will make the candy just as hard as it will be after the candy gets cold.



Fudge Cooker and Mixer.

BAR SPECIALTIES—VANILLA PECAN BAR

Cook in fudge stirring kettle 15 lbs. of sugar, 10 lbs. of corn syrup, 1 quart of water, 14 lbs. of condensed milk, 2 lbs. of Nuco butter.

Cook to stiff ball when tried in cold water. Then turn off the steam and add 20 lbs of short cream fondant and mix thoroughly, then add 8 lbs of corn syrup and mix for 10 minutes; then add 2 ounces of salt and 2 ounces of vanilla flavor. Pour out on trays with five-eighths inch rods, and in spreading fudge work you should have a wide steel scraper for spreading the fudge work, for when you spread the top of the batch too much with a palette knife the fudge will show streaks.

Now as soon as the heat is out of the batch, glaze with confectioners' glaze, or you can use gelatine dissolved in water for glazing the fudge. But in using the gelatine dissolved in water, you must add this gelatine water while the batch is warm, so that the heat from the batch will dry up the water, and just leave the gelatine for coating the top of the goods.

GELATINE GLAZE FOR FUDGE WORK

Soak 2 ounces of powder gelatine in 8 ounces of water, then dissolve the gelatine by placing in hot water, then it is ready to use. This stock must be made up fresh every day, and can be put on by the use of a brush.

FONDANT CREAM TO BE USED FOR FUDGE WORK

Cook in steam kettle 100 lbs. of sugar, 30 lbs. of corn syrup, 3½ gallons of water. Cook to 240 degrees. Pour out on Dayton ball beater, and when partly cool start to cream the fondant to a cream.

Now for the vanilla pecan bar. After the batch is poured

out on the wax paper-lined tray, sprinkle pecan halves over the top of the batch, and then take a rolling pin and roll these pecans into the fudge so that the top of the batch will be smooth. Then, when cool enough, glaze and let stand until next day. Then mark in bars 1¼ inches wide and 3½ inches long. Then cut in bars and pack 24 bars to a carton.

For chocolate pecan bar, use 6 lbs of liquor chocolate, or cocoa powder. When the batch reaches a soft ball, then finish cooking the batch to a stiff ball when tried in cold water. Then finish like vanilla bar.

VANILLA WALNUT FUDGE BAR

Cook in fudge stirring kettle 24 lbs. of sugar, 20 lbs. of corn syrup, 2½ lbs. of Nuco butter, 1½ quarts of water.

Cook to a stiff ball when tried in cold water. Then add 15 lbs. of fondant cream and mix thoroughly for 10 minutes. Then add 8 lbs. of corn syrup and mix thoroughly. Then add 2 ounces of vanilla flavor and 2 ounces of salt. Then pour out on trays lined with wax paper, and use rods on the trays five-eighths inch high. Then, when cool enough, glaze and let stand until next day. Then mark into bars with a fudge marker or an adjustable cutter. Then cut in bars and pack 24 to carton.

CHOCOLATE WALNUT FUDGE BAR

For chocolate walnut bar use 8 lbs of liquor chocolate or cocoa powder, and add the chocolate just before the batch is cooked to a stiff ball when tried in cold water. Then finish the same as for vanilla walnut bar.

VANILLA COCOANUT BAR

Cook in a fudge stirring kettle 20 lbs. of sugar, 15 lbs of corn syrup, 1½ lbs. of Nuco butter, 15 lbs of condensed milk, 1 quart of water, and cook to a stiff ball when tried in

cold water. Then add 12 lbs. of fondant cream and mix thoroughly for 10 minutes. Then add 8 lbs. of corn syrup and mix thoroughly, then add 2 ounces of salt and 2 ounces of vanilla flavor. Then add 7 lbs. of shredded cocoanut and mix through the batch; then pour out on trays lined with heavy wax paper, with half-inch rods on the tray. Then, when cool enough, glaze; then the next day mark 1¼ inches wide by 4 inches long. Then pack 24 in carton.

RAISIN FUDGE BAR

Cook in a fudge stirring kettle 15 lbs. of sugar, 10 lbs. of corn syrup, 1 qt. of water, 12 lbs. of condensed milk, 1½ lbs. of Nuco butter. Cook to a stiff ball when tried in cold water. Then add 12 lbs. of fondant cream and mix thoroughly for ten minutes. Then add 5 lbs. of corn syrup and mix thoroughly. Then add 3½ lbs. bleached Sultana raisins. Then pour out on trays with rods five-eighths inch high. Then sprinkle the top of the batch with some Sultana raisins. Then take a rolling pin and roll the raisins down into the fudge so that the top of the batch will be smooth. Then, when cool enough, glaze; then the next day mark in bars and pack 24 to carton.

CHERRY FRUIT FUDGE BAR

Cook in a fudge stirring kettle 18 lbs. of sugar, 12 lbs. of corn syrup, 2 lbs. of Nuco butter, 15 lbs. of condensed milk, 1 quart of water.

Cook to a stiff ball when tried in cold water. Then add 12 lbs. of fondant cream and mix thoroughly for 10 minutes. Then add 6 lbs. of corn syrup and thoroughly mix, then add 2 ounces of vanilla flavor, 1 ounce of salt and 5 lbs. of glazed cherry pieces. Then pour out on trays lined with heavy wax paper, with rods one-half inch high. Then spread out, and when cool enough, glaze and let stand over

night. Then mark and cut into bars and pack 24 in a carton.

BLACK WALNUT BAR

Cook in a fudge stirring kettle 15 lbs. of sugar, 10 lbs. of corn syrup, 1 quart of water, 10 lbs. of condensed milk, 1 lb. of Nuco butter. Cook to a stiff ball when tried in cold water. Then add 12 lbs. of fondant cream and mix thoroughly for 10 minutes. Then add 5 lbs. of corn syrup and 2 ounces of vanilla flavor and 2 ounces of salt. Then pour out on trays lined with heavy wax paper with one-half inch rods, then sprinkle the top of the batch with black walnuts that are free from shells, then roll the walnuts into the batch so that the top of the batch will be smooth. Then, when cool enough, glaze. Then let stand over night, then mark into bars 1½ inches wide by 3 inches long, then cut and pack 24 to carton.

PINEAPPLE FUDGE BAR

Cook in a steam stirring kettle 15 lbs. of sugar, 10 lbs. of corn syrup, 1 quart of water, 12 lbs of condensed milk, 1 lb. of Nuco butter. Cook to a stiff ball when tried in cold water. Then add 12 lbs. of fondant cream and mix for 10 minutes, then add 5 lbs. of corn syrup and 1 ounce of vanilla, 1 ounce of salt; then add 5 lbs. of chopped pineapple pieces very small. Then pour out on trays lined with heavy wax paper, with one-half inch rods; then, when cool enough, glaze and mark in bars 1¼ by 3 inches. Then cut, and when dry pack in cartons 24 to carton.

ALMOND MILK BAR

Cook in a fudge stirring kettle 18 lbs. of sugar, 11 lbs. of corn syrup, 12 lbs of condensed milk, 1 lb. of Nuco butter, 1 quart of water. Cook to a stiff ball when tried in cold

water. Then add 14 lbs. of fondant cream and mix thoroughly for 10 minutes. Then add 7 lbs. of corn syrup and 5 lbs of milk chocolate and 4 lbs. of roasted almonds that are ground coarse through a food chopper, then add 1 ounce of vanilla flavor and 1 ounce of salt. Then pour out on trays lined with heavy wax paper with rods one-quarter inch high; then, when the batch sets, mark 1¼ by 3 inches; then cut in bars, then dip in milk coating on the enrober dipping machine, then pack in cartons 24 to carton.

FULL CREAM BAR

Cook in steam stirring kettle, 20 lbs. of sugar, 15 lbs. of corn syrup, 2 gallons of 20 per cent cream, 12 lbs. of condensed milk, 2 lbs. of Nuco butter. Cook to a stiff ball when tried in cold water, then add 14 lbs. of fondant cream and mix thoroughly for 10 minutes, then add 5 lbs. of corn syrup and mix thoroughly, then add 2 ounces of vanilla flavor and 2 ounces of salt, then pour out on trays lined with heavy wax paper, with rods five-eighths inch high, then sprinkle the top of the batch with pecan halves, then press the pecan down into the batch so that the top of the batch will be smooth; then, when the batch is cool enough, glaze and mark into bars. Pack in cartons 24 to carton.

ITALIAN STYLE CREAM FUDGE

Cook in steam stirring kettle 20 lbs. of sugar, 12 lbs. of corn syrup, 2 quarts of water, 12 lbs. of condensed milk, 1 lb. of Nuco butter. Cook to a stiff ball when tried in cold water, then add 15 lbs. of fondant cream and mix thoroughly for 10 minutes, then add 7 lbs. of corn syrup, 2 ounces of vanilla flavor and 2 ounces of salt. Then pour out on trays lined with heavy wax paper with one-quarter inch rods; then, when cool enough, glaze and mark in bars 1½ by 3½ inches and pack in cartons 24 to carton.

IDEAL FUDGE BAR

Cook in steam stirring kettle 20 lbs. of sugar, 14 lbs. of corn syrup, 2 quarts of water, 14 lbs. of condensed milk, 2 lbs. of Nuco butter. Cook to a stiff ball when tried in cold water. Then add 12 lbs. of fondant cream and mix thoroughly for 10 minutes, then add 6 lbs. of corn syrup and mix thoroughly, then add 2 ounces of vanilla flavor and 2 ounces of salt; then add 2 lbs. of glaze cherry pieces, 2 lbs. of almonds and 2 lbs. of chopped figs and 2 lbs of thread cocoanut: Pour out on trays lined with heavy wax paper with three-eighths inch rods; then, when cool enough, glaze and mark into bars; then cut next day, and when dry pack in cartons 24 to carton.

WALNUT SPECIAL BAR

Cook in steam stirring kettle 15 lbs. sugar, 10 lbs of corn syrup, 1 lb. of Nuco butter, 12 lbs. of condensed milk. Cook to a stiff ball when trie din cold water, then add 12 lbs. of fondant cream and mix thoroughly, then add 5 lbs. of corn syrup and mix thoroughly, then add 5 lbs. of walnut pieces, 2 ounces of vanilla flavor, 2 ounces of salt; then pour out on trays lined with wax paper, with rods three-eighths inch; then, when cool enough, mark in bars, then next day cut. Then pack in cartons 24 to carton.

COLLEGE FUDGE BAR

Cook in steam stirring kettle 16 lbs. of sugar, 10 lbs of corn syrup, 14 lbs. of condensed milk, 2 lbs of Nuco butter, 1 quart of water. Cook to a stiff ball when tried in cold water, then add 12 lbs. of fondant cream and mix thoroughly for 10 minutes, then add 5 lbs. of corn syrup and mix thoroughly, then add 2 ounces of vanilla flavor and 2 ounces of salt. Then pour out on trays lined with heavy wax paper with one-half inch rods, then sprinkle the top of the batch

with whole filberts; then take the rolling pin and press the filberts down into the fudge so that the top of the batch will be smooth; then, when the batch is cool enough, glaze and mark into bars; then let stand over night and pack in cartons 24 to carton.

FIG FUDGE BAR

Cook in steam stirring kettle 15 lbs. of sugar, 12 lbs of corn syrup, 2 lbs of Nuco butter, 10 lbs. of condensed milk, 1 quart of water. Cook to a stiff ball when tried in cold water, then add 10 lbs. of fondant cream and mix thoroughly for 10 minutes, then add 5 lbs. of corn syrup, 7 lbs. of chopped figs, 4 lbs of thread cocoanut and 2 ounces of vanilla flavor and 1 ounce of salt. Pour out on trays lined with heavy wax paper with rods three-eighths inch high; then, when cool enough, glaze and mark in bars. Then cut into bars; next day, when dry, pack in cartons 24 to carton.

VANILLA AND CHOCOLATE FUDGE SQUARES

Cook in a steam stirring kettle 20 lbs. of sugar, 10 lbs. of corn syrup, 2 quarts of water, 12 lbs. of condensed milk, 1 lb. of Nuco butter. Cook to a stiff ball when tried in cold water. Then add 12 lbs. of fondant cream and mix thoroughly for 10 minutes, then add 6 lbs. of corn syrup and mix thoroughly, 2 ounces of vanilla flavor and 2 ounces of salt. Then pour out on trays lined with heavy wax paper with rods one-quarter inch high; then, when cool enough, glaze and mark in 1¼ inch squares. Then pack in cases 4 layers to a case, next day, with a wax paper divider between each layer.

For chocolate fudge squares, add 5 lbs. of cocoa powder just before the batch is cooked to a stiff ball when tried in cold water.

PEANUT FUDGE BAR

Cook by steam stirring kettle 12 lbs. of sugar, 12 lbs. of corn syrup, 1 quart of water, 12 lbs. of condensed milk, 1½ lbs of Nuco butter. Cook to a stiff ball when tried in cold water. Then add 8 lbs. of fondant cream and mix thoroughly for 10 minutes, then add 4 lbs. of corn syrup and mix thoroughly, then add 14 lbs. of roasted Spanish No. 1 peanuts that are blanched, then add 2 ounces of vanilla flavor and 2 ounces of salt. Then pour the batch out on a greased slab that is dusted with flour, then spread out and roll down to three-eighths inch thick with rolling pin; then, when cold, cut in bars and dip on the enrober dipping machine in thin chocolate. Then, when dry, pack in cartons 24 to carton.

DIVINITY FUDGE

Cook by steam kettle 15 lbs. of sugar, 11 lbs. of corn syrup, 2 quarts of water, 1½ lbs. of Nuco butter. Cook to a light crack, or 258 degrees, then turn off the steam and add 15 lbs. of fondant cream and mix thoroughly, then add 4 lbs. of special nougat fondant and 2 ounces of vanilla flavor; add 7 lbs. of roasted Spanish No. 1 peanuts; or you can use walnut pieces, and only mix the nut meats through the batch; then pour out on trays lined with heavy wax paper, with one-quarter inch rods; then, when cool enough, mark in 1 inch squares; then, when dry enough, pack in cases 4 layers to a case, with wax paper between each layer.

SULTANA DIVINITY FUDGE

Make the batch the same as for the peanut or walnut, but in place of using peanuts, sprinkle the top of the batch after it is poured out on the trays with Sultana bleached raisins; then roll the raisins down into the batch with a rolling pin so that the top of the batch will be smooth. Then,

when cool enough, mark in squares; then, when dry next day, pack in cases 4 layers to a case.

FILBERT DIVINITY FUDGE

In place of the peanuts, sprinkle the top of the batch with crushed filberts; then roll the crushed filberts down into the batch so that the top of the batch will be smooth.

NOUGAT SPECIALTIES

In manufacturing nougat specialties on a large scale for the jobbing trade, the manufacturer should have a good stirring kettle that is made for heavy beating. All this work should be turned out on wooden trays that are lined with paper. The wholesale manufacturer should have at least 36 to 48 trays made from 1-inch boards, with end cleats 1½ inches high. The trays should be 24x36 inches, so that the standard size wax paper can be used without any waste. In the manufacture of nougat specialties use only the flake egg albumen, as the nougat when made with egg albumen will retain a better color when made up for any any length of time.

Egg albumen should always be put to soak in cold water at least 5 hours before using, and it is still better to soak all the egg albumen that you expect to use for the day, the night before, so that the egg albumen will be thoroughly disolved.

Egg albumen should never be soaked in a tin pail or tin container of any kind, as the tin will change the color of the egg albumen. Use nothing but glass jars in soaking egg albumen, in cold water, and never use warm or hot water for soaking egg albumen, as the hot water will curdle the agg albumen.

Egg albumen, when soaked in cold water and then placed in some warm place like a drying room, the egg albumen will dissolve in a few hours.

For the nougat trays you should have made rods of wood, and the rods should be made of different thickness, so that

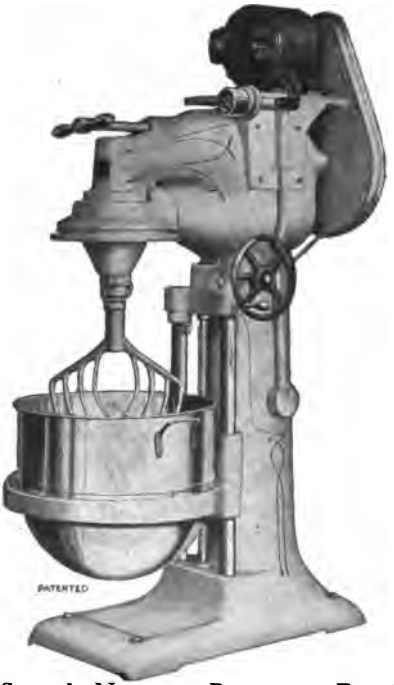
they can be used on the different kinds of specialties. Each rod should have a small nail in each end of the rod, so as to hold the rod in place on the tray.

FRUITS THAT ARE USED IN NOUGAT WORK

When using fruits always use the dry fruits, as glazed pineapple, glazed cherries, raisins, figs, and nuts of all kinds can be used in the manufacture of nougat specialties.

COOKING NOUGAT WORK

When cooking the syrup for nougat work always cook the syrup higher during the hot weather months than you do for the cool weather months. When cooking syrup for nougat that is to be dipped, the syrup should be cooked 5 degrees lower than for nougat specialties that are to be used for counter goods or pail specialties.



Read's Three-Speed Nougat Beater. Read's Machinery Co., York, Pa.

NOUGAT BAR SPECIALTIES, CHOCOLATE COATED

Soak 14 ounces of egg albumen in 1 quart of water over night. Then, next morning, place in nougat beater with 1 lb. of special nougat fondant and beat the batch up very light. Cook Part 1 on open fire, or by steam, in a copper kettle, 8 lbs. of sugar, 10 lbs. of corn syrup, with 1 quart of water. Cook to 260 degrees, then pour in your beaten egg albumen and beat up very stiff.

Now cook Part 2 on open fire in copper kettle.

12 lbs. of sugar, 8 lbs. of corn syrup, with 1 quart of water. Cook to 262 degrees. Then pour this Part 2 batch into the batch that is beaten up stiff, and let beat for 5 minutes. Then add 1 lb. of cream fondant and 2 lbs. of Nuco butter and mix thoroughly. Then add 5 lbs. of glaze cherry pieces and 1 ounce of vanilla flavor. Then spread out on trays lined with heavy wax paper that are dusted with flour, and use five-eighths inch rods around the trays. These rods should be made of wood and have two small nails driven into each end, so that when you press the batch the rods will not slide out. Then, when the batch is spread out, dust the top of the batch with flour. Then lay a heavy sheet of wax paper on top of the batch. Then place one of the trays on top of the wax paper and use some heavy weight to weigh the batch down with, or else place one batch on top of the other and stack 5 high, so then you will only have to weight the top batch. Then let stand until next day, then pull the paper off and mark into bars and cut on nougat machine 1 inch wide and 3½ inches long. Then dip in thin chocolate and then pack 24 to carton.

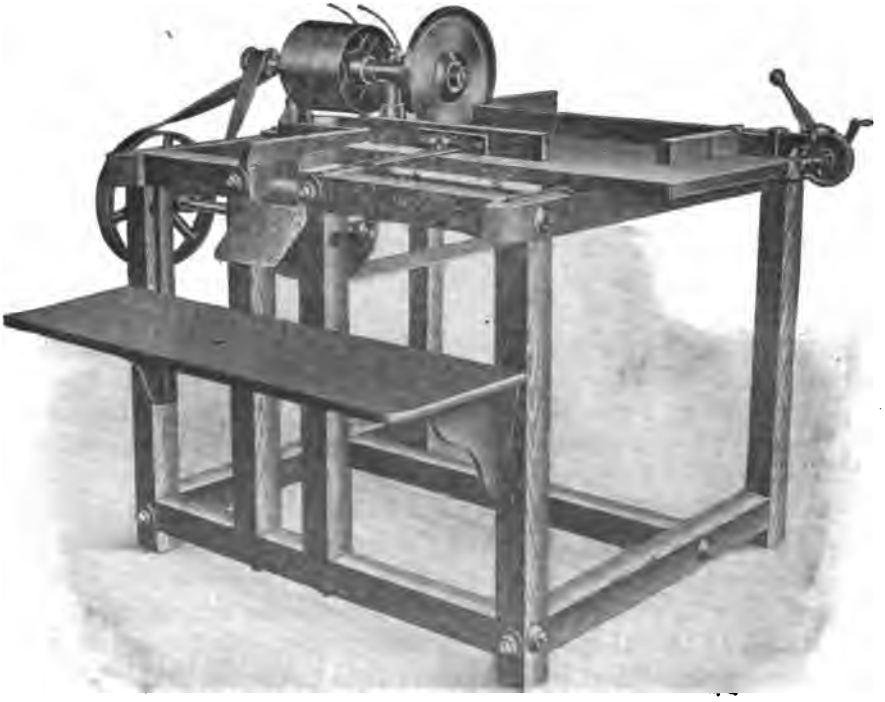
ALMOND NOUGAT CHOCOLATE BAR

Soak over night 1 lb. of egg albumen in 1 quart of water. Place in beater with 1 lb. of special nougat fondant and beat up very light. Now cook Part 1 on open fire in copper kettle, 10 lbs. of corn cyrup, 8 lbs. of sugar, with 1 quart of water and cook to 260 degrees; then pour into the beaten

egg batch and beat very stiff. When adding the cooked batch to the egg always change to second speed, and only use the fast speed when beating the egg albumen. Then always change to second speed for the cooked syrup.

Now cook Part 2 on open fire in copper kettle.

12 lbs. of sugar, 10 lbs. of corn syrup, with 1 quart of water. Cook to 260 degrees. Then pour into the beaten batch and beat for 5 minutes. Then add 5 lbs. of almonds, 2 ounces of vanilla flavor and 1 ounce of salt and 2 lbs. of Nuco butter. Mix thoroughly, then add 1½ lbs. of fondant cream and mix through, then spread out on trays lined with wax paper and dusted with flour; then dust the top of the batch with flour, and then place a sheet of wax paper on top, then press. Let stand over night, then mark and cut on nougat machine into bars. Then dip on enrober machine.



Racine Nougat Cutter. Racine Machinery Co., Racine, Wis.

CARAMEL NOUGAT BAR

Caramel Part—Cook by steam stirring kettle 9 lbs. of corn syrup, 7 lbs. of sugar, 1 quart of water, 7 lbs. of condensed milk, 1 lb. of Nuco butter. Cook to a stiff ball when tried in cold water, or to 245 degrees. Add 1 ounce of vanilla flavor and 1 ounce of salt. Then pour out on a greased slab that is dusted light with flour and spread the caramel very thin on the slab.

Nougat Part—Cook on open fire in copper kettle 10 lbs. of corn syrup, 10 lbs. of sugar, with 1 quart of water. Cook to 260 degrees, then pour in the dissolved egg albumen, 14 ounces of egg to 1 quart of water which has soaked over night. Then beat up very stiff. Now cook part 2 on open fire, 12 lbs. of corn syrup, 10 lbs. of sugar, with 1 quart of water. Cook to 260 degrees, then add 1 lb. of cream fondant and 2 lbs. of Nuco butter and 1 ounce of vanilla flavor; then add 3 lbs. of ground almonds, then spread on top of the caramel that is on the slab. Then roll down by sizing machine to three-eighths inch thick, then cut in bars 1½ inches wide by 3 inches long, then dip in thin chocolate by the enrober machine. Pack 24 to carton.

FRUIT NOUGAT BAR

Soak over night 14 ounces of egg albumen in 1 quart of water. Now cook on open fire in copper kettel, 10 lbs of corn syrup, 8 lbs. of sugar with 1 quart of water. Cook to 260 degrees. Then have the egg beaten up light with 1 lb. of special nougat fondant and pour this cooked batch in the egg and beat up very stiff. Then cook Part 2 on the open fire, 12 lbs. of sugar, 10 lbs of corn syrup, with 1 quart of water. Cook to 260 degrees. Then pour into Part 1 and beat up. Then add 2 lbs. of Nuco butter and 1 ounce of vanilla flavor and 1½ lbs. of cream fondant. Mix thoroughly, then add 2 lbs. of raisins, 2 lbs. of glazed cher-

ries and 1 lb. of pineapple pieces cut up. Then pour out on trays lined with wax paper and dusted with flour. Then place a sheet of wax paper on top, but dust the top first with flour. Then press, and use rods for trays one-half inch, and mark next day 1¼ inches wide and 3½ inches long. Then dip in chocolate on the enrober machine.

PRINCESS NOUGAT BAR

Soak over night 1 lb. of egg albumen in 1 quart of water. Then, next morning, place in beater with 1 lb. of special nougat fondant and beat up very light. Now cook on open fire in copper kettle, 12 lbs. of corn syrup, 8 lbs. of sugar, with 1 quart of water. Cook to 260 degrees. Then pour into the beaten egg and beat very stiff.

Now cook Part 2 on open fire, 14 lbs. of sugar, 8 lbs. of corn syrup, with 1 quart of water. Cook to 261 degrees. Then pour this batch into Part 1 and mix thoroughly for 5 minutes, and then add 2 lbs. of Nuco butter and mix through. Now then, have 1½ lbs. of glazed cherries cut up fine, then spread out a thin layer of white nougat on the tray that is lined with wax paper and dusted with flour. Now then, take one-third of the batch and color a light pink, and add the cherries that are to be used for the center, then add 2 lbs. of crushed almonds in the rest of the white batch, then place this white nougat on top of the cherry center, then dust the batch with flour and place a sheet of wax paper on top; then press, let stand over night, then mark into bars and cut on nougat machine.

SULTANA RAISIN BAR

Soak over night 1 lb. of egg albumen in 1 quart of water. Then, next morning, place the egg in the beater with 1 lb. of special nougat fondant and beat up very light. Now cook on the open fire in copper kettle, 10 lbs. of corn syrup,

8 lbs. of sugar, with 1 quart of water. Cook to 260 degrees. Then pour into the egg and beat up very stiff.

Now cook Part 2 in copper kettle on open fire, 10 lbs. of corn syrup, 12 lbs. of sugar, with 1 quart of water. Cook to 260 degrees, then pour into Part 1 batch and beat thoroughly. Then add 2 lbs of Nuco butter and 2 lbs. of fondant cream and mix, then add 2 ounces of vanilla flavor. Place out on trays lined with heavy wax paper and dust with a little flour and use three-eighths inch rods. Then sprinkle Sultana raisins over the top of the batch and roll the raisins down into the batch so that the raisins will stick to the nougat. Let stand until next day, then mark into bars and dip on the enrober machine in thin chocolate.

MAPLE NOUGAT WALNUT BAR

Soak over night 1 lb. of egg albumen in 1 quart of water. Next day place the dissolved egg albumen in the beater with 1 lb. of special fondant and beat up very light.

Then cook Part 1 on open fire in a copper kettle, 5 lbs. of maple sugar with 2 quarts of water, and as soon as the maple sugar is dissolved add 4 lbs. of granulated sugar and 10 lbs. of corn syrup and cook to 260 degrees. Then pour into the beaten egg batch and beat the batch up very stiff.

Now cook Part 2 in a copper kettle on the open fire, 10 lbs. of sugar, 8 lbs. of corn syrup, with 1 quart of water, and cook to 262 degrees. Then pour this cooked syrup into the batch that is beaten up stiff, and mix thoroughly for 5 minutes. Then add enough burnt sugar to give the batch a light maple color, then add 2 lbs. of Nuco butter and 1 lb. of fondant cream and 1 ounce of maple flavor. Then add 4 lbs. of walnut pieces, then place out on trays lined with wax paper and dusted with flour, with five-eighths inch rods. Then, next day, mark and cut into bars, then dip on the enrober dipping machine.

HONEY ALMOND NOUGAT BAR

Soak over night 14 ounces of egg albumen in 1 quart of water. Then place in beater with 1 lb. of special nougat fondant and beat up very light.

Now cook Part 1 in copper kettle on the open fire, 8 lbs. of sugar, 10 lbs of corn syrup, with 1 quart of water. Cook to 260 degrees, then pour into beater and beat up very stiff.

Now then, cook Part 2 in a copper kettle on the open fire, 12 lbs. of sugar, 9 lbs. of corn syrup, 3 lbs. of honey, with 1 quart of water. Cook to 260 degrees, then pour into beater and mix for 5 minutes, then add 1½ lbs. of Nuco butter, 2 lbs. of fondant cream and 6 pounds of almonds that are crushed; then add 2 ounces of vanilla flavor, then place out on trays lined with wax paper dusted with flour and use rods three-eighths inch high, and dust the top with flour. Then place a sheet of wax paper on top of the batch, then place a tray on top of the wax paper, then press well and let the batch stand until next day. Then mark 1½ inch wide and 3 inches long. Then cut in bars and dip on the enrober machine in thin chocolate.

APRICOT NOUGAT BAR

Soak over night 14 ounces of egg albumen in 1 quart of water. Then, the next morning, place into beater with 1 lb. of special fondant and beat up very light.

Now cook Part 1 in a copper kettle on the open fire, 8 lbs. of corn syrup, 8 lbs. of sugar, with 1 quart of water. Cook to 260 degrees, then pour into beater and beat up very stiff.

Then cook Part 2 in a copper kettle on the open fire, 12 lbs. of sugar, 10 lbs. of corn syrup, with 1½ quarts of water. Cook to 260 degrees, then pour into the beaten batch and mix thoroughly for 5 minutes, then add 2 lbs. of Nuco butter and 1 lb. of fondant cream, then add 5 lbs. of dry apricots

that are cut into small pieces. Then place out on trays lined with wax paper and dusted with flour, and then dust the top with flour. Then place a sheet of wax paper on top of the batch, then press well, then let stand until next day. Then mark into bars and dip in thin chocolate on the enrober machine.

NOUGAT FUDGE BAR

Nougat Part.—Soak over night 14 ounces of egg albumen in 1 quart of water. Then place into beater with 1 lb. of special nougat fondant and beat up very light. Then cook on the open fire in a copper kettle, 10 lbs. of corn syrup, 8 lbs. of sugar, with 1 quart of water. Cook to 260 degrees, then pour into beater and beat the batch very stiff.

Then cook Part 2 in a copper kettle on the open fire, 10 lbs. of sugar, 8 lbs. of corn syrup, with 1 quart of water. Cook to 260 degrees, then pour into beater and mix thoroughly, then add 2 lbs. of fondant cream, 2 lbs. of Nuco butter, 1 ounce of vanilla flavor; then add 2 lbs. of crushed almonds, then spread out on trays lined with three-eighths inch rods and heavy wax paper.

Fudge Part.—Cook in a steam stirring kettle 5 lbs. of sugar, 5 lbs. of corn syrup, 7 lbs. of condensed milk, 1 pint of water, 1 lb. of Nuco butter. Cook to a stiff ball when tried in cold water, then turn off the steam and add 3 lbs. of fondant cream and mix for 5 minutes, then add 3 lbs. of corn syrup and 1 ounce of vanilla flavor and 1 ounce of salt and mix thoroughly for 5 minutes, then pour out on top of the nougat and spread this fudge very thin; then, when cool enough, glaze with confectioner's glaze or gelatine glaze. Then mark and cut into bars, and when dry pack 24 to a carton.

WALNUT TOP FUDGE NOUGAT

Use 3 lbs. of crushed walnuts and roll the walnuts into

the batch. Do not use any of the fine dust for topping fudge. Then roll down smooth; then, when cool enough, glaze. The next day cut into bars and when dry pack 24 to a carton.

NOUGAT FOR PACKAGE GOODS

Soak over night 14 ounces of egg albumen in 1 quart of water. Then place into beater with 1 lb. of special nougat fondant and beat up very light. Now cook on the open fire in a copper kettle 12 lbs. of corn syrup, 10 lbs. of sugar, with 1 quart of water. Cook to 260 degrees. Pour into the beaten batch and beat very stiff.

Now cook Part 2 in a copper kettle on the open fire, 14 lbs. of corn syrup and 10 lbs. of sugar, with 1 quart of water.. Cook to 262 degrees for hot weather, or 260 degrees for cool weather. Then pour this cooked syrup into the beaten batch, then add 1 lb. of flour and 2 lbs. of Nuco butter, 1 ounce of vanilla flavor, then add 6 lbs. of almonds that are ground coarse through a food chopper, then mix thoroughly, then pour out on a greased slab that is dusted with flour, or on trays lined with Kraft paper, with 1½ inch rods on the trays. Then let stand until next day. If you use the Kraft paper, it must be soaked with a wet cloth, then the paper will peel right off. Then dust heavy with starch. Then cut in strips on nougat machine, then on caramel cutter in an oblong shaped piece. Then dip on the enrober machine, or by hand, in vanilla dark coating.

HONEY NOUGAT FOR PACKAGE GOODS

Soak over night 16 ounces of egg albumen in 1 quart of water, then place into beater with 1 lb of special nougat fondant and beat the batch very light. Then cook on the fire in a copper kettle 8 lbs. of sugar, 10 lbs. of corn syrup, 1 quart of water. Cook to 260 degrees, then pour into the beaten egg albumen and beat the batch very stiff. Then

cook Part 2 on open fire in a copper kettle, 15 lbs. of corn syrup and 12 lbs. of sugar, 5 lbs of honey, 1½ quarts of water. Cook to 260 degrees for cold weather, or 262 degrees in hot weather. Then pour this batch into the beaten batch. Then mix thoroughly, then add 2 lbs. of Nuco butter, 3 lbs. of almonds, 2 lbs of glazed cherries, 1 lb. of pineapple, cut up; 1 ounce of vanilla flavor and 1 ounce of salt. Pour out on Kraft paper dusted with flour, and use 1½ inch rods. Then dust the top of the batch with flour. Let stand until next day, then cut into strips on nougat machine and then in oblong pieces, then dip in chocolate.

CARAMEL NOUGAT FOR PACKAGE GOODS

Caramel Part.—Cook in steam jacket stirring kettle 12 lbs of corn syrup, 7 lbs. of sugar, 8 lbs. of condensed milk, 1 lb. of Nuco butter. Cook to a soft ball when tried in cold water, then add 2 lbs. of cocoa powder or liquor chocolate, then finish cooking the batch to a stiff ball when tried in cold water, then add 1 ounce of vanilla flavor and 1 ounce of salt. Pour out on a greased slab and spread the caramel on the slab very thin.

Nougat Part.—Soak over night 14 ounces of egg albumen in 1 quart of water, then place in beater with 2 lbs. of special nougat fondant and beat up very light. Then cook on the open fire in a copper kettle, Part 1: 10 lbs. of corn syrup, 8 lbs. of sugar, 1 quart of water. Cook to 260 degrees, then beat up very stiff.

Now cook Part 2 in copper kettle on the open fire, 14 lbs. of corn syrup, 10 lbs. of sugar, with 1½ quarts of water. Cook to 262 degrees for hot weather or 260 degrees for cool weather. Then pour into the beaten batch and mix thoroughly, then add 2 lbs. of Nuco butter, 1 lb. of flour, 5 lbs. of crushed walnuts, 1 ounce of salt and 1 ounce of vanilla flavor. Then pour out on the caramel part and roll

down so that your batch is one-quarter inch thick, then let stand until cool enough, then cut into strips on the nougat machine 1½ inches wide, and then cut into oblong pieces. Then dip in chocolate by hand or enrober machine.

COUNTER NOUGAT—FRENCH STYLE

Soak over night 14 ounces of egg albumen in 1 quart of water. Then place into beater with 2 lbs. of special nougat fondant and beat up very light. Then cook in a copper kettle on the open fire, 10 lbs. of corn syrup, 8 lbs. of sugar, with 1 quart of water. Cook to 260 degrees, then pour into beater with the egg albumen and beat very stiff.

Now cook Part 2 in copper kettle on the open fire, 12 lbs. of sugar, 8 lbs. of corn syrup, with 1 quart of water. Cook to 265 degrees in warm weather, 267 degrees in hot weather and 263 degrees in cold weather. Pour this cooked syrup into the beaten batch, then add 2 lbs. of Nuco butter, 2 lbs. of short fondant cream, 1 ounce of salt, 1 ounce of vanilla flavor. Then add 2 lbs. of Pistachio nuts, 4 lbs. of almonds, 2 lbs. of glazed cherries. Pour into trays lined with wax paper and dusted with flour, and use 1 inch rods, then dust the top of the batch with flour, then place a sheet of wax paper on top of the batch, then press the batch well by placing a tray on top, then a heavy weight, then let stand over night. Then cut into strips by nougat machine, then, with a French knife, into oblong pieces. Then, when dry pack into pails or boxes, or sell over the counter.

PECAN NOUGAT FOR COUNTER

Soak over night 14 ounces of egg albumen in 1 quart of water. Then place into beater with 2 lbs. of special nougat fondant and beat up very light.

Now cook 10 lbs. of corn syrup with 8 lbs. of sugar, 1 quart of water. Cook to 260 degrees, then pour into the

beaten egg albumen and beat very stiff.

Now cook Part 2 in a copper kettle on the open fire 12 lbs. of sugar, 8 lbs. of corn syrup, with 1 quart of water. Cook to 265 degrees, then pour into the beaten batch and mix thoroughly, then add 2 lbs. of short fondant cream and 2 lbs. of Nuco butter and mix well. Then add 6 lbs of Pecan halves or pieces, flavor with 2 ounces of vanilla and 1 ounce of salt. Then pour out on trays lined with heavy wax paper that is dusted with flour, then sprinkle the top of the batch with pecan halves, then place a sheet of wax paper on top of the batch and press with a heavy weight, then let stand until next day. Then cut in strips on nougat machine, then in squares.

COUNTER FRUIT NOUGAT

Soak over night 14 ounces of egg albumen in 1 quart of water. Now cook on open fire in a copper kettle 10 lbs. of corn syrup, 8 lbs. of sugar, with 1 quart of water. Cook to 260 degrees, then beat up very stiff in the beaten egg albumen.

Now cook Part 2 in a copper kettle on the open fire, 12 lbs. of sugar, 8 lbs. of corn syrup, with 1½ quarts of water. Cook to 265 degrees, then pour this cooked syrup into the beaten batch and mix thoroughly, then add 2 lbs. of short fondant cream and 2 lbs. of Nuco butter and mix well into the batch, then add 3 lbs. of pineapple pieces, 3 lbs. of glazed cherries and 2 lbs. of figs that are cut up into small pieces, then flavor with 1 ounce of vanilla flavor. Then pour out on trays lined with heavy wax paper dusted with flour, and use 1 inch rods on the trays, then place a sheet of wax paper on top of the batch, then a tray, and press well with a heavy weight, then let stand over night. Then cut by nougat machine in strips, then by French knife.

POINTER THAT SHOULD BE KEPT IN MIND WHEN MAKING NOUGAT

When only making one batch at a time, use 1 to 2 cases

of chocolate to press down the nougat, or some heavy iron rods. When the nougat is not pressed well it will be very hard to cut on the nougat machine, and in filling the trays the nougat should be filled up above the rods on the trays, so that the nougat will get a chance to settle down when the weight is placed on the batch.

WRAPPED NOUGAT

Soak over night 1 lb. of egg albumen in 1 quart of water. Then place into beater with 2 lbs. of special nougat fondant and beat very light.

Cook on the open fire in a copper kettle, 12 lbs. of corn syrup, 8 lbs. of sugar, 1 quart of water. Cook to 260 degrees,, then pour this cooked syrup into the beaten egg albumen and beat the batch up very stiff.

Now then, cook Part 2 in a copper kettle on the open fire, 14 lbs. of corn syrup, 9 lbs. of sugar, 1 quart of water. Cook to 262 degrees, then pour this cooked syrup into the beaten batch and mix thoroughly, then add 2 lbs. of Nuco butter, 1 lb. of flour and 2 ounces of vanilla flavor, and mix thoroughly, then add 2 lbs. of cherry pieces, 2 lbs. of almonds, 2 lbs. of pineapple pieces. Pour out on trays lined with Kraft paper dusted with flour, and use 1½ inch rods on the trays, then let stand over night, then wet the paper with a wet cloth, then the paper will peel off. Then dust heavy with starch, then cut in strips on nougat machine, then in oblong pieces on the caramel cutting machine. Then wrap in printed wax papers.

For Spice Wrapped Nougat, use 7 lbs. of spice gum drops, assorted.

For Peanut Wrapped Nougat, use 8 lbs. of roasted Spanish No. 1 peanuts.

For French Style Wrapped Nougat, cut some chocolate caramels up on the caramel machine in small squares, then,

after the batch is ready to be poured out on the trays, add 8 lbs. of the chocolate caramels and only mix through, then pour out on trays and finish the same as for wrapped nougat.

CHOCOLATE CARAMEL FOR WRAPPED NOUGAT

Cook in steam stirring kettle 7 lbs. of corn syrup, 5 lbs. of sugar, 5 lbs. of condensed milk, 1 lb. of Nuco butter. Then cook to a soft ball when tried in cold water, then add 2 lbs. of cocoa powder of liquor chocolate. Then finish cooking the batch to a stiff ball, when tried in cold water; then add 1 ounce of vanilla and 1 ounce of salt. Then pour out on a greased cold slab. When cold cut into small squares; then use for the nougat.

GUM WORK SPECIALTIES

In the manufacture of gum work specialties of all kinds, to turn out this work successfully all of this class of work should be cooked by steam jacket stirring kettle; also depositing machines for depositing the gum work in the starch. You should also have the starch bucks for brushing the starch from the gum work. You should have the automatic lifting truck for trucking the starch trays to and from the depositor to the drying room.

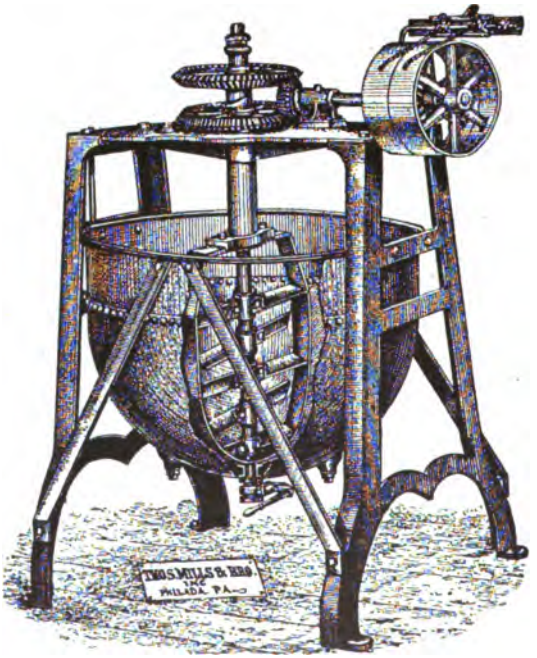
The manufacturer who intends to manufacture gum work must have a drying room that is heated by steam coils, to keep the starch warm as well as for drying up the gum work while casted in starch, as most of the gum work must be left to dry in the drying room for at least 5 days. Gum work that is casted in cold starch will not be fit for sale and will have to be worked over again in very small quantities added to a fresh batch of gum work.

There are two different kinds of gum work casted in starch. One is called the soft gums and the other the hard gums. At the present time the soft gums are finding the most ready sale with the jobbing trade, as well as the public, but to make this Candy Teacher complete I will cover the work thoroughly on the soft and hard gums.

The Soft Gums are made by cooking pearl starch with water, sugar and corn syrup, and different flavors; then placed in the drying room for 5 days with a temperature of 120 degrees in the drying room. Then after 5 days of drying they are taken from the starch, then sanded with sugar, then some are finished by placing them in a crystal syrup at 34 degrees.

The Hard Gums are made by using gum arabic dissolved in water; then sugar and corn syrup is cooked to at least 270 degrees; then the water is evaporated in the steam kettle or vacuum pan, then deposited in hot starch and left in the drying room for 5 days at a temperature of 120 degrees.

GUM WORK SPECIALTIES



Steam Jacket Gum Cooking Kettle. Thomas Mills Bros., Philadelphia, Pa.

CRYSTALIZED GUM STRINGS FOR BOX GOODS

Cook in steam jacket gum stirring kettle. Dissolve 21 lbs. of Pearl cooking starch in 10 gallons of water, then add 1½ ounces of citric acid to the dissolved starch. Always dissolve the Pearl starch in a tin tub, then add the citric acid and thoroughly mix; then, before placing the dissolved starch in the batch, the starch water should be strained through a fine sieve. Now cook in the gum kettle 100 lbs. of corn syrup, 75 lbs. of sugar, with 4 gallons of water; then turn on the steam on the gum kettle and start to cook the batch; then, when the batch comes to a boil, add the dissolved Pearl starch slowly, so that the batch does not boil over the kettle; then finish cooking the batch of gum until the gum falls in a sheet from a paddle or palette knife. Then, when the batch falls in a sheet from the palette knife, color the batch in the different colors that you are going to have, and flavors.

For clear color, flavor the batch with 2 ounces of oil of lemon flavor. For pink color, flavor the batch with 2 ounces of wintergreen.

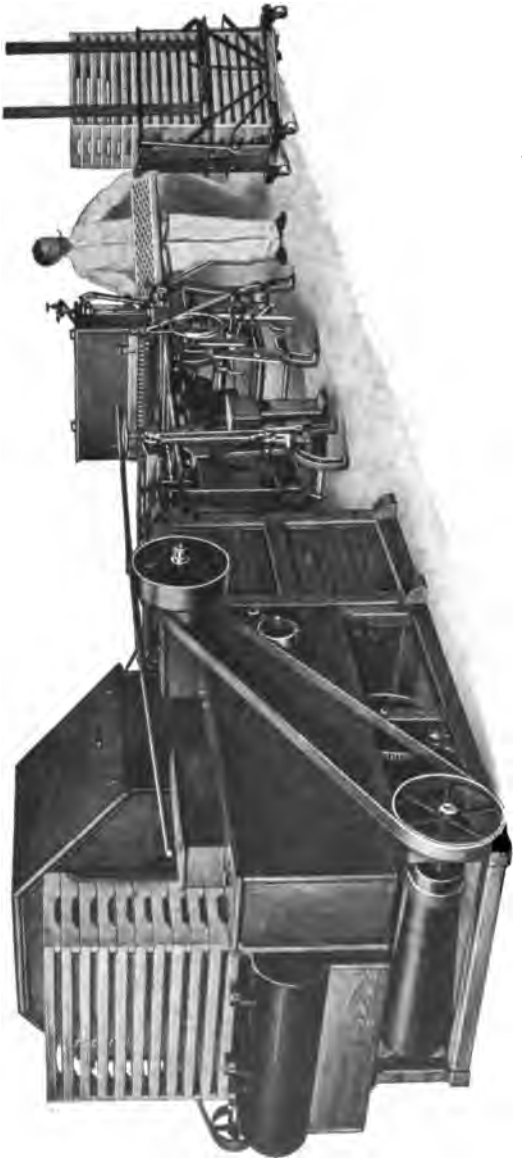
For orange color, flavor with 2 ounces of orange.

For green color, flavor with 2 ounces of oil of peppermint.

For lavender color, flavor with 1 ounce of extract of violet.

Then draw the batch from the cooking kettle and pour in hopper on the depositing machine, then cast in stick shape mould, then, as fast as the trays are filled, have them trucked into the drying room to be left in there for 5 days, to dry out.

THE MOGUL MACHINE



Machine used for Casting, Refilling, Cleaning and Moulding. National Equipment Co., Springfield, Mass.

This machine is used in all the up-to-date houses for gum work and cream mixtures of all kinds.

The Mogul is used for cleaning the candy, refilling and leveling the starch trays and moulding and casting the goods.

In operating the Mogul, full starch trays are placed in the iron rack in a pile. The endless link belt removes the bottom tray, dumps it, turns it right side up again, and conveys it under an avalanche of starch, whence it passes under a leveling device, which removes the surplus starch and smooths the tray ready for printing. The tray then passes to the printer, where it is moulded accurately. From the printer it passes to the depositor, where the trays are filled with gum work or cream mixtures. All sizes and shapes may be used with extra pump bars for the depositor.

The Mogul has a capacity of from 5 to 8 tons of candy per day, depending on the size of the gum work.

After leaving the depositor the trays of molded candy are set in the drying room to dry; then, when they are ready to be taken out from the starch, they are replaced on the feed end of the Mogul and the operation above described is repeated.

Automatic Lifting Truck. National Equipment Co., Springfield, Mass.

The use and advantages of this truck will be readily seen by a glance at the accompanying half-tone, for lifting and

trucking the filled starch trays from one part of the room to the other. In operation the truck is placed against a pile of starch trays, the lever is raised, automatically opening the clutch, the truck being in position, the lever is lowered, which closes the clutch and raises the load from the floor. It may now be wheeled where desired. To release the load the lever is raised, automatically releasing the clutch and lowering the trays to the floor.

CRYSTALLIZED ASSORTED JELLIES

Cook in gum kettle 100 lbs. of corn syrup, 100 lbs. of sugar, 5 gallons of water. Cook to a boil and then add 24 lbs. of Pearl starch dissolved in 11 gallons of water, and 2 ounces of citric acid. Then pour this dissolved starch water into the cooking batch very slowly. Then cook the batch until it falls in small sheets from a paddle or palette knife. Then add the different colors and flavors. Then cast by depositor machine in hot starch. Let dry for 5 days in drying room.

For assorted jellies, make strawberry, lemon, orange and wintergreen. After the gum work is dry enough they should be taken out of the starch and brushed well by machine; then they should be given a coating of dissolved gum arabic, then sanded with sugar. Then they must be left to dry over night, then next day they are ready to be crystalized in syrup at 33½ degrees. Then spread out on the tables to dry off. When they come from the crystal they are ready to be packed in 5-lb boxes.

IMPERIAL GUMS FOR BOX GOODS

Cook in gum kettle. Place in the kettle 1 lb. of Jap gelatine with 3½ gallons of water. Turn on the steam and thoroughly dissolve the Jap gelatine, then strain through a fine sieve. After the batch is strained add 23 lbs. of sugar,

25 lbs. of corn syrup and cook the batch until it strings from a paddle or palette knife. As this is jelly work, it must not be cooked to a sheet like gum work, only so that it will hang in fine strings when you dip the paddle into the batch, then pour out in tin tub.

Now cook the gum part in gum kettle, 40 lbs. of corn syrup, 25 lbs. of sugar, with 1 gallon of water. Cook to a boil, then add 8 lbs. of Pearl starch dissolved in 4 gallons of water, and 1 ounce of citric acid; then pour the dissolved starch into the batch that is cooking, and finish cooking the batch until it drops in small sheets from a palette knife, then turn off the steam and add the batch of jelly that is in the tin tub, then turn on the steam and mix thoroughly only, then turn the steam off from the kettle and flavor the batch. Make these in assorted colors and flavors, then pour into depositor and cast in hot starch. Then let stand in dry room for 5 days, the temperature around 120 degrees. Then, when dry, take out and sand with dissolved gum arabic and sugar. Then, when dry, crystalize in 33½ degrees crystal syrup.

ORANGE GUM DROPS CRYSTALIZED FOR BOX GOODS

Cook in gum kettle 100 lbs. of corn syrup, 90 lbs. of sugar, with 4 gallons of water. Cook to a boil, then add 24 lbs. of Pearl starch dissolved in 12 gallons of water, and 2 ounces of citric acid. Then pour this dissolved starch into the batch that is cooking, and cook until the batch drops in small sheets from the palette knife, then turn off the steam and flavor with 3 ounces of oil of orange and color the batch a light orange color; then pour in depositor and cast. Place in dry room for 5 days at 120 degrees, then, when dry, crystalize in 33½ syrup.

They must be sanded with gum arabic and sugar and

thoroughly dry before placed in crystal.

All gum work, when crystallized too damp, will blister after they are dry, so you must be sure, before placing gum work in crystal, that the goods are dry, to get a fine crystal.

LEMON AND ORANGE GUMS SANDED

100 lbs. of corn syrup, 70 lbs. of sugar, 4 gallons of water. Cook to a boil and then add 21 lbs. of Pearl starch dissolved in 10 gallons of water with 2 ounces of citric acid, then pour in the batch that is cooking and finish cooking until the batch drops in sheets from the palette knife. Then turn off the steam and color the batch and flavor. Then cast by depositor, then let stand in dry room 5 days. Then dissolve some gum arabic in water and sand with granulated sugar. Use the revolving pan for sanding the goods.

For lemon batch, use 3 ounces of oil of lemon, and color a light yellow color.

For orange, color a light orange and flavor with 3 ounces of oil of orange flavor.

ASSORTED FRUIT PASTE

Cook in steam stirring kettle 50 lbs. of sugar, 15 lbs. of corn syrup, 3 gallons of water. Cook to a boil, then add 10 lbs. of Pearl starch dissolved in 4 gallons of water and 2 ounces of citric acid. Then pour this dissolved starch into your boiling batch and cook the batch until the paste drops in a sheet from the paddle or a palette knife. Then make assorted fruit paste in lemon flavor, orange flavor and color the batch a light orange color, raspberry flavor and color a red fruit color, and mint flavor and color the batch a light green color.

ASSORTED FRUIT PASTE

Pure Sugar Fruit Paste.—Cook in stirring kettle 50 lbs.

of sugar, 2 ounces of cream of tartar, with 3 gallons of water. Cook to a boil, then add 8 lbs. of Pearl starch and 2 ounces of citric acid dissolved in 4 gallons of water and add the dissolved Pearl starch slowly to the boiling batch. Then cook the batch till it drops in a sheet when you dip the paddle into the paste, or till it drops in a sheet from a palette knife; then your batch is cooked. Then add the flavors and colors for the different kinds of paste made. Pour out on trays with five-eighths inch rods and have the trays lined with paper, then let stand for 3 days, then take the paper off and let dry in starch for 1 day; then cut in squares and throw in powder sugar and starch. Use two-thirds powder sugar and one-third starch, then let lay in the powder sugar and starch over night, then pack in tin boxes that will hold 5 lbs. of paste. In packing the paste dust each layer heavy with the powder sugar and starch and a sheet of heavy wax paper between each layer.

CANDY GUM FIGS

Cook in gum kettle 100 lbs. of corn syrup, 70 lbs of sugar, with 4 gallons of water. Cook to a boil, then add 21 lbs. of Pearl starch dissolved in 10 gallons of water, with 2 ounces of citric acid. Then pour the disolved starch in the batch that is cooking, and finish cooking until it drops in small sheets from the palette knife, then add 10 lbs. of figs ground up very fine through a food chopper, and thoroughly cook the figs in the batch. Then cast by depositor in mould shape of a fig, then place in dry room for 5 days, then take out of starch and sand with granulated sugar. Then, when dry, pack in flat wooden cases, with a few green leaves between each layer of figs, which will make the package show up well.

CANDY GUM RASPBERRIES

Cook in gum kettle 90 lbs. of corn syrup, 70 lbs. of sugar

with 3 gallons of water. Cook to a boil and then add 20 lbs. of Pearl starch dissolved in 10 gallons of water, with 2 ounces of citric acid. Then pour in the batch and finish cooking until the batch drops in small sheets from the palette knife. Then color with a little red and black color to give the berry the natural color when cast in starch. Then cast by depositor and place in dry room for 5 days. Then, when dry, sand them with gum arabic and granulated sugar. When dry pack in cases with containers of small berry boxes.

CANDY PINEAPPLE FINGERS

Cook in gum kettle 80 lbs. of sugar, 50 lbs. of corn syrup, with 4 gallons of water. Cook to a boil, then add 17 lbs. of Pearl starch dissolved in 7 gallons of water, with 2 ounces of citric acid. Then pour into the batch that is cooking and finish cooking the batch until it drops in small sheets from the palette knife, then add 1 gallon of pineapple fruit ground very fine. Then cook the batch so that it drops in sheets from the knife. Then pour in depositor machine and cast in small bar shape mould. Place in dry room for 5 days, then take out and sand with granulated sugar, then crystalize, then pack in 5 lb boxes.

TROPICAL GUMS FOR PAIL MIX

Cook in gum kettle 100 lbs. of corn syrup, 50 lbs of sugar, with 4 gallons of water. Cook to a boil, then add 18 lbs. of Pearl starch dissolved in 8 gallons of water, with 1½ ounces of citric acid, and finish cooking the batch until it drops in small sheets from the knife. Then make these gums in different colors and flavors and cast by depositor in moulds of different designs.

Make clear, orange, red and green colors, flavor clear with lemon, orange, with orange flavor, red with anise flavor,

and green with wintergreen. Leave in starch for 5 days and sand in granulated sugar.

DAINTY MINT GUMS FOR PACKAGE GOODS

Cook in gum kettle 80 lbs. of corn syrup, 60 lbs. of sugar, with 4 gallons of water. Cook to a boil, then add 17 lbs. of Pearl starch in 7 gallons of water, with 1½ ounces of citric acid and finish cooking the batch until it drops in a sheet from a palette knife. Then flavor with 2 ounces of oil of mint and color a light green color. Then pour into depositor machine and cast in a small drop shape. Then place in dry room for 5 days. Then sand them with gum arabic and granulated sugar, when dry. Next day crystallize them in crystal at 33½ syrup.

SANDED A. B. GUM DROPS

Cook in gum kettle 100 lbs. of corn syrup, 20 lbs of sugar, with 3 gallons of water. Cook to a boil and then add 15 lbs. of Pearl starch with 7 gallons of water, 1 ounce of citric acid, and cook until the batch drops in small sheets from the palette knife, then add the different colors and flavors and cast in drop shape moulds. Make clear lemon flavor, red anise flavor, orange orange flavor, green wintergreen flavor.

Cast by depositor and let stand in dry room for 5 days, so that they are thoroughly dry, then take out and sand them with gum arabic and granulated sugar. Pack in pails and barrels for mixed candy.

GUM CENTERS FOR THE REVOLVING PAN

Cook by gum kettle 100 lbs. of corn syrup, 25 lbs of sugar with 2 gallons of water. Cook to a boil, then add 14 lbs. of Pearl starch, dissolved in 8 gallons of water, with 1½ ounces of citric acid, and finish cooking the batch until it

drops in small sheets from the palette knife. Then flavor with 1 ounce of oil of lemon and cast in small bean shape by the depositor machine. Then let stand in dry room for 5 days. Then, when they are taken out from the starch that is hot, they should be put into cold starch, so that they will keep their shape, and leave in the cold starch over night. Then run through the starch buck. Then they are ready to be run up in the pans, and they should be given a wetting with gum and sugar so that they will not stick together.

EXTRA FINE JELLY BEAN CENTER

Cook in gum kettle. Disolve 1 lb. of Jap gelatine in 4 gallons of water and cook the gelatine so that the Jap gelatine is thoroughly dissolved. Then strain through a fine sieve.

Now place in the gum kettle and add 35 lbs. of sugar, 25 lbs. of corn syrup, and cook until the batch strings only. Then pour out in the tin tub. Now cook in gum kettle 70 lbs. of corn syrup, 30 lbs. of sugar with 2 gallons of water, and cook to a boil, and then add 14 lbs. of Pearl starch, dissolved in 6 gallons of water, with 1 ounce of citric acid, and finish cooking until the batch drops in small sheets from the palette knife. Then turn off the steam and pour the batch that is in the tin tub into the gum batch and mix thoroughly, with the steam turned on while mixing the two batches. Then turn off the steam from the kettle and flavor with 1 ounce of oil of lemon. Then pour into depositor machine and cast in small bean-shaped moulds. Then place in dry room for 5 days. Then take out of starch and place in cold starch over night, then run the gums through the starch buck again, so that they are thoroughly cleaned. Then give them a wetting with dissolved gum arabic, and then granulated sugar. Then they are ready to be run up in the pans in different flavors and colors.

APRICOT GUM CENTERS FOR PANS

Cook in gum kettle 75 lbs. of corn syrup, 75 lbs. of sugar, with 4 gallons of water. Cook to a boil and then add 18 lbs. of Pearl starch dissolved in 8 gallons of water with 3 ounces of citric acid, and cook the batch until it drops in small sheets from the palette knife. Then add 10 lbs. of apricot pulp that is rubbed through a sieve, and cook the batch until it drops in sheets from the knife. Then pour into depositor machine and cast in round drop shape mould. Then place in dry room for 5 days, then, when dry, take out and run in the pans and finish in an apricot color.

CANDY GUM CHERRIES

Cook in gum kettle 60 lbs. of corn syrup, 40 lbs. of sugar, with 3 gallons of water. Then cook to a boil and then add 14 lbs. of Pearl starch dissolved in 6 gallons of water with 1½ ounces of citric acid, and cook the batch until it drops in sheets from the palette knife. Then add 1 gallon of crushed cherries that are rubbed through a sieve. Then cook until the batch drops in sheets from the knife. Then color the batch a light red and pour in depositor machine and cast in small round shape moulds. Then place in the dry room for 5 days. Then, when dry, take out and run up in pans and finish a red color. Then pack in cases with small berry boxes and a few green leaves on each berry box. Sold to the jobbing trade.

LICORICE GUM CUBES

Cook in gum kettle 60 lbs. of corn syrup, 40 lbs. of sugar, with 3 gallons of water. Then cook the batch to a boil, then add 12 lbs. of Pearl starch, with 5 gallons of water with 1 ounce of citric acid. Always dissolve the starch and the acid in the water before adding to the cooked batch. Then cook the batch until it drops in small sheets

from the palette knife. Then add 1 lb. of powder licorice and color the batch a black color with Velvetine black. Then add 2 ounces of anise flavor. Then pour in depositor and cast in small square moulds. Then place in dry room for 5 days to dry. Then, when dry, run them up in the pans and finish in a black color.

JELLY GUM EGGS FOR EASTER ASSORTMENT

Cook in gum kettle 70 lbs. of corn syrup, 30 lbs. of sugar, with 3 gallons of water. Cook to a boil, then add 12 lbs. of Pearl starch dissolved in 5 gallons of water, with 1 ounce of citric acid, then pour into the batch and finish cooking the batch until it drops in small sheets, then pour into depositor and cast into small egg shape moulds.

As soon as the batch is cooked add 1 ounce of oil of lemon flavor, before pouring into the depositor. Then place in dry room after they are casted in starch, and let dry for 5 days. Then, when dry, take out of the starch and run up in the pans and finish in white, red, yellow, green and orange. For the white flavor mint, yellow flavor lemon, for the red flavor anise, for the orange flavor orange flavor.

JAP JELLY EGGS FOR EASTER ASSORTMENT

Cook in gum kettle. Soak 2 lbs. of Jap gelatine in 8 gallons of water for 1 hour, then place in cooking kettle and cook the gelatine until thoroughly dissolved, then add 60 lbs. of sugar and 40 lbs. of corn syrup and cook the batch until it strings from the palette knife, then turn off the steam and flavor with 1 ounce of oil of lemon. Then pour out in a tin tub and let stand until it is only lukewarm. Then pour into depositor and cast in small egg shape moulds. Let stand over night only. Do not place this Jap jelly work in the dry room, or the jelly will not set. Then, next day, take out of starch and run up in the pans in different flavors and colors.

JELLY CENTER FOR CUPID MIX

Cook in gum kettle. Soak 2 lbs. of Jap gelatine in 8 gallons of water for 1 hour. Then place in cooking kettle and cook until the gelatine is dissolved, then add 60 lbs. of sugar and 40 lbs. of corn syrup and cook the batch until it strings from the palette knife. Then pour out in tin tubs, then let partly cool, then add 1 ounce of oil of lemon, and when cool enough pour in depositor and cast in very small oblong moulds. Then let stand over night, and then take out and give the centers a wetting with gum arabic and granulated sugar. Then, when dry, run up in the pans in different flavors and colors.

RASPBERRY JELLIES

Cook in gum kettle. Soak 2 lbs. of Jap gelatine in 8 gallons of water for 1 hour. Then place in cooking kettle and cook until the gelatine is dissolved. Then add 60 lbs. of sugar and 40 lbs. of corn syrup and cook until the batch strings from the palette knife, then pour out in tin tub to cool. Now, while this batch is cooling, cook in gum kettle 1 gallon of Spanish apricot pulp and 1 gallon of crushed raspberries that have been rubbed through a sieve, with 12 lbs. of sugar and 4 lbs. of corn syrup. Cook to a thick jam. Then pour this batch into the Jap gelatine batch in the tub and mix thoroughly, then add 2 ounces of raspberry flavor, and just before the batch is ready to be poured into the depositor add 2 ounces of citric acid. Then color with a red and lavender to make the raspberry look the natural color. Then let stand in starch over night. Then take out and give the centers a wetting with gum arabic and granulated sugar dissolved. Then, when dry, pack in small berry boxes, with some green leaves. Cast in a raspberry shape mould, not too large a shape mould.

STRAWBERRY JELLIES

Make the Jap jelly batch the same as the raspberry batch. Then for the fruit add 1 gallon of crushed strawberries and one gallon of Spanish apricot pulp run through a sieve. Then cook 12 lbs. of sugar and 4 lbs of corn syrup and cook to a jam. Then color the batch a light red and flavor with 2 ounces of strawberry flavor.

Deposit in a strawberry shape mould and then, when taken out of the starch, give them a wetting with gum arabic and granulated sugar. Let dry over night, then pack in small berry boxes, and use a few stems or green leaves on each box.

APRICOT JELLIES FOR FANCY BOXES

Cook in gum kettle. Soak 1 lb. of Jap gelatine in 4 gallons of water 1 hour. Then place in the cooking kettle and cook until the gelatine is dissolved. Then add 30 lbs. of sugar and 20 lbs. of corn syrup and cook until it strings from the palette knife. Then pour out in tin tub to cool. Now while this batch is cooling cook in gum kettle 1 gallon of Spanish apricot pulp that is rubbed through a sieve, with 5 lbs. of sugar and 3 lbs. of corn syrup, and cook until it falls in sheets from the paddle, or cook it until it is a jam. Then pour this batch into the Jap gelatine batch and mix thoroughly. Then, when the batch is cool enough to cast, add 2 ounces of citric acid and mix thoroughly. Then cast in an apricot shape, and let stand in starch over night. Then take out from the starch and have the girls stick the two halves together. Then put in trays, then sand them with gum arabic and granulated sugar.

The apricot can be glazed by putting the apricots in a gelatine water that is lukewarm, that will take all the starch from the apricot jelly centers, and when placed out on trays to dry they will have a very pretty gloss. They must be

placed on wire screen trays when they are washed in the warm gelatine water, then placed on trays to dry over night. Then have girls stick stems in the apricots, which will make them look very natural. Then pack in 1-lb. boxes, only one layer to a box.

Candy Pears can be made the same way, only use different moulds. Have a small pear shape mould to cast the jelly in; then finish the same as the apricot.

Candy Plums can be made the same way, only grind 5 lbs. of canned plums, or rub the canned plum fruit through a sieve. Then color with lavender and red to give the jelly the natural color. Then finish like the apricot. These candy fruits can be packed assorted in 1 lb. boxes, which find a ready sale to the high-class retail trade.

ASSORTED CRYSTALIZED JELLIES FOR 5-LB. BOXES

Cook in gum kettle. Soak 1 lb. of Jap gelatine in 4 gallons of water for 1 hour. Then place in cooking kettle and cook until the Jap gelatine is dissolved. Then add 30 lbs of sugar and 20 lbs of corn syrup and cook until the jelly strings from the palette knife. Then pour out in tin tub to cool. Then flavor and color, just before it is ready to be casted in starch. Make lemon flavor and color yellow, strawberry flavor and color a red color, orange flavor and color an orange color, green color and flavor with wintergreen: Let stand in starch over night and take out next morning and give them a wetting with dissolved gum arabic and granulated sugar. Then let dry one day. Then crystalize in 33½ syrup. When dry, pack in layers assorted.

LEMON AND ORANGE SLICES

Cook in gum kettle. Soak 1 lb. of Jap gelatine in 4 gallons of water for 1 hour. Then place in cooking kettle and

cook until the Jap gelatine is thoroughly dissolved. Then add 30 lbs. of sugar and 20 lbs. of corn syrup, and cook the batch until it strings from the palette knife. Then turn off the steam from the kettle and add 1 ounce of oil of lemon. Then pour out in a tin tub and let stand until cool enough to cast. Then have some half round moulds about 5 inches long, then cast in starch and let stand over night. Then take out and brush the starch from the jelly bar, then dip in a cream fondant that is flavored and colored yellow.

When dipping the bars in cream fondant, have the girls dip the bars first in a white cream fondant, then in a thin yellow fondant. Then, as soon as the cream sets on the bar, cut in thin slives with a French knife. Then throw in granulated sugar, then next day, crystalize in syrup at 33½ degrees.

For orange, dip the bar first in white cream fondant, then in an orange color cream fondant, and flavor with orange flavor.

FONDANT CREAM FOR DIPPING

59 lbs. of sugar, 12 lbs. of corn syrup, 1½ gallons of water. Cook to 240 degrees, then pour out on ball cream beater and cream to a fondant when the syrup is cool enough so that it will hold an impression.

ASSORTED JELLY CUTS FOR PAIL GOODS

Soak 2 lbs. of Jap gelatine in 8 gallons of water for 1 hour. Then place in cooking kettle and cook the gelatine until thoroughly dissolved, then add 60 lbs. of sugar and 40 lbs. of corn syrup and cook until the jelly strings from a knife. Then turn off the steam and pour out in a tin tub to cool.

Now, when the batch is partly cool in the tub, take out in a pail 20 lbs. of jelly and flavor with one-quarter ounce

of oil of lemon. Then pour out on trays lined with manilla wrapping paper and spread the jelly one-quarter inch thick. Now take 20 lbs. of the jelly and color a red color and flavor with 1 ounce of strawberry flavor. Then pour out on lined trays with manilla paper with one-quarter inch rods.

Now take 20 lbs. of the jelly and flavor with one-quarter ounce of oil of orange and color a light orange color. Then pour out on trays lined with paper with one-quarter inch rods.

Now take 20 lbs. of the jelly and color a light green and flavor with one-quarter ounce of oil of peppermint. Then pour out on the trays lined with paper and one-quarter inch rods.

Now take 20 lbs. of the jelly and flavor with one-quarter ounce of oil of wintergreen, and color a light brilliant rose color. Then pour out on trays lined with paper.

Then let all the jelly set over night on the trays.

Now then, after the jelly has set over night, next morning cook a batch of cream fondant to be used for the center for the jelly cuts.

FONDANT CREAM FOR JELLY CUTS

Cook by steam kettle 50 lbs of sugar, 12 lbs. of corn syrup, with 1 2-3 gallons of water. Cook to 243 degrees, then pour out on ball cream beater, and only let the syrup get partly cool, then cream to a fondant. Then the batch is ready to be used for the center. Take one tray at a time of the different colors of jelly and place a thin layer of cream fondant on top of the jelly, then take another tray of the same kind of jelly and lay on top of this cream fondant, then take and soak the paper off from the jelly. To soak the paper off from the jelly, just take a wet cloth and dampen the paper and let stand for 2 minutes, and it will peel right off. After you have taken the paper from the

jelly, then throw some granulated sugar on the jelly. Then let stand until next day, then cut in squares.

Now then, finish all the different colors of jelly the same way. Then, after the jellies are cut in squares, let dry over night, then place in crystal pans and cook a crystal at 33½ degrees.

HARD GUM SPECIALTIES

In the manufacture of hard gum specialties, all this class of work must be casted in hot starch, and then left in the drying room at 120 degrees for 5 days. This class of goods is made by the use of gum arabic, which must be thoroughly washed, and when dissolved strain through a fine sieve, as when buying gum arabic there are a lot of fine sticks, and sometimes small stones will be found in the gum arabic.

After the gum arabic is washed, then place it to soak over night in cold water and use 1 pound of water to every pound of gum arabic.

Then, next morning, place in the stirring kettle and thoroughly dissolve by using a little heat on the kettle, as you must not let the gum arabic come to a boil when dissolving the gum, and always use the stirring kettle when disolving the gum arabic. Now, when the gum arabic is dissolved, always strain the disolved gum arabic through a fine sieve.

ASSORTED CANDY KIDS FOR BOX GOODS

Dissolve 50 lbs. of gum arabic in 6½ gallons of water in steam stirring kettle Then, when the gum arabic is dissolved and strained, cook by steam kettle or open fire 35 lbs. of sugar, 15 lbs. of corn syrup, 1 gallon of water. Cook to 280 degrees. Then pour this cooked syrup into the disolved gum arabic that is in the stirring kettle, and

use very little heat on the kettle, so that the batch does not come to a boil, then cook the batch slowly until it drops in a sheet from the knife. If you let the batch boil up thoroughly in the kettle the gum work will all string when casting in the starch, and if you do not cook the gum enough, the gum work will get hollow and the starch will cling to the goods. Then let the batch stand for half an hour in the kettle without any steam or stirring, then a scum will form on top of the batch. Then skim this off, and it can be used in the licorice drops.

Then pour in depositor and cast in small kid moulds. Make them in clear and flavor with lemon, red color and flavor wintergreen, orange and flavor with orange flavor. Then place in dry room for 5 days. Then, when dry, take out to cool over night, then run through the starch buck, and clean the starch off thoroughly. Then take and give them a polish with Stanolax oil. Place some in a revolving pan, then wet them with Stanalax oil and let them dry on trays.

LICORICE CANDY KIDS FOR BOX GOODS

Dissolve 50 lbs. of gum arabic in 6½ gallons of water. in a stirring kettle. Now take 5 lbs. of licorice block and dissolve it in one gallon of water. Then, when the licorice is disolved, pour into your dissolved gum arabic in your stirring kettle.

Now cook by steam kettle 35 lbs. of sugar, 15 lbs. of corn syrup with 1 gallon of water. Cook to 285 degrees, then start the stirring kettle going with a little steam turned on the kettle, then add the cooked syrup that is cooked to 285 degrees slowly, and do not let the batch come to a boil in the stirring kettle, only let the batch simmer on the sides of the kettle, without the stirrer going on the kettle; then dip the palette knife into the batch, and if the gum drops from the knife in small sheets, then the batch is cooked.

Then color the batch a black color with Velvetine black and add 1 ounce of anise flavor. Then let the batch stand for 30 minutes and let the scum form the top of the batch, then skim this scum off. Then cast by depositor machine in starch, using small kid moulds. The starch must be dry and hot for this gum work, then they must be placed in the drying room for at least 5 days, then taken out and left to cool over night. Then they are brushed by starch buck, then polish them, after they are thoroughly cleaned from starch, with Stanolax oil. Then place in trays to dry, then pack.

LICORICE GUM DROPS FOR BOX GOODS

Dissolve 55 lbs. of gum arabic in 7 gallons of water. Then dissolve 5 lbs. of licorice block in 1½ gallons of water, then pour in the dissolved gum arabic.

Now cook on the open fire 35 lbs. of sugar, 15 lbs. of corn syrup, with 1 gallon of water. Cook to 290 degrees. Then pour this cooked syrup into the dissolved gum slowly, then let the batch simmer around the sides of the kettle with the stirrer going, then when the gum drops in small sheets from the palette knife, turn off the steam and let the batch stand for 30 minutes, then skim the skum from the top of the batch, then color the gum a black color with Velvetine black and flavor with 1 ounce of oil of anise flavor. Then cast by depositor in hot starch, using a drop shape mould. Then place in drying room for 5 days, then take out to cool over night, then brush clean from starch, then glaze with vaseline or Stanolax oil. When dry pack in 5-lb. boxes.

CANDY RASPBERRIES

Dissolve 50 lbs. of gum arabic in 6½ gallons of water, in a stirring kettle.

Now cook on the open fire 35 lbs. of sugar, 15 lbs of corn

syrup, with 1 gallon of water. Cook to 285 degrees. Then pour this cooked batch into the dissolved gum arabic and let the batch simmer until the batch drops in small sheets from a palette knife, then let stand for 30 minutes, then skim the top of the batch, then color the batch of gum a raspberry color and flavor with 4 ounces of true fruit raspberry flavor. Then pour into depositor and cast in hot starch, using a raspberry shape mould. Then let dry for 5 days in dry room, then take out to cool over night, then clean them thoroughly by running them through the starch buck. Then glaze them with hot vaseline or Stanolax oil.

ASSORTED GLAZED GUM DROPS

Dissolve 60 lbs. of gum arabic in 8 gallons of water in stirring kettle. Now cook on the open fire 45 lbs of sugar, 15 lbs. of corn syrup with 1½ gallons of water. Then cook to 285 degrees, then pour this cooked batch into the dissolved gum and let the batch simmer around the sides of the kettle until the gum drops in small sheets from the palette knife. Then turn off the steam from the kettle and let the batch stand for 30 minutes, then skim the top of the batch, then flavor and color, then cast by depositor in hot starch and let dry for 5 days in drying room.

Make them in assorted colors, the clear batch flavor with lemon, the red batch flavor with anise flavor, the orange flavor with orange.

ASSORTED GLAZES

Soak 12 lbs. of gelatine in 24 lbs. of water for 1 hour. Then place in steam kettle and heat the gelatine until thoroughly dissolved. Do not let the gelatine boil. Then cook on the open fire 45 lbs. of corn syrup, 45 lbs of sugar, with 1½ gallons of water Cook to 285 degrees; Then pour

this cooked syrup into the dissolved gelatine and let simmer, but do not let the batch boil up; then, when the batch drops in small sheets from the palette knife, turn off the steam from the kettle. Then let the batch stand for 30 minutes, then skim the top of the batch, then cast by depositor in hot starch, using a small drop shape mould.

Make them in red, orange, green and black colors. For the red use anise flavor, for the green use mint flavor, for the orange use orange flavor, for the black use 5 lbs. of licorice dissolved in 1½ gallons of water, then cook the water out until the licorice is thick like, then add some Velvetine black color and pour into the batch while it is simmering in the kettle.

MARSHMALLOW WORK

In the manufacture of the different marshmallow specialties, to make a success of this class of work you must have a drying room that is heated by steam, where the temperature can be kept at around 120 degrees, so as to keep the starch hot enough and thoroughly dry, as marshmallow goods of all kinds should be casted in dry hot starch, but must not be placed in the drying room after the marshmallow is casted in the starch. The trays when filled with marshmallows should be placed in some part of the room that is free from steam, so that no steam will have a chance to settle on the marshmallow work, and the trays must not be placed by open window when filled with marshmallow work, as the damp air will cause the goods to sweat and get sticky.

Marshmallow work, when casted in hot starch, should be left standing in the starch for 2 days before taken out to be packed into boxes. Marshmallow drops should be dusted with dry hot starch as soon as they are casted in starch. That will keep the marshmallow from having a

glossy top, which always causes the marshmallow drops to stick together when packed. When the marshmallows have a gloss on the sides they should be left in the starch until the gloss has disappeared on the marshmallow drop. If they are packed with a gloss on the sides they will stick when packed in the boxes. Never use the marshmallow starch for cream work, as the starch gets full of fine siftings or tailings from the cream goods, which will cling to the marshmallow drops when casted in starch.

For beating marshmallow work an open beater or stirring kettle, I have found, will give the best results in making a first-class marshmallow drop

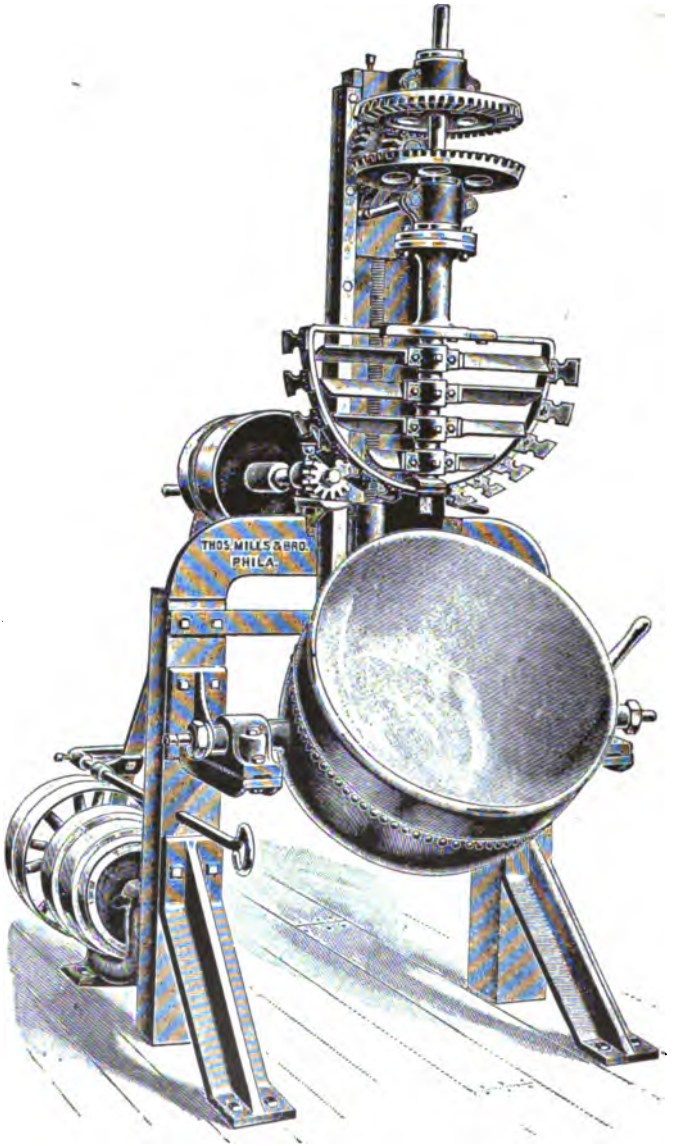
Any confectioner who is contemplating manufacturing marshmallow specialties should have the latest beaters, melting kettles, depositor for casting the goods, printers and starch buck for cleaning the marshmallows to make a success in turning out a first-class line of marsmallow specialties.

400 COUNT MARSHMALLOWS, OR 5-LB. BOXES

Melting Kettle for Cooking the Sugar and Corn Syrup.

Soak over night 8 ounces of egg albumen in 1 pint of water. Then soak 1½ lbs. of fast setting gelatine in 11 lbs. of water for 1 hour. Now dissolve the gelatine that you have soaked for 1 hour in the melting kettle, by very little heat, as you must not let the water and gelatine come to a boil, or it will destroy the setting of the marshmallow goods when they are casted in starch. Now, as soon as the gelatine is dissolved, add 25 lbs. of granulated sugar and turn on a little steam on the kettle and stir the batch until the sugar is thoroughly dissolved in the gelatine water, then add 5 lbs. of corn syrup and mix thoroughly. Then pour into the marshmallow beater and beat very light. Then add 20 lbs of corn syrup and the 8 ounces of dissolved egg albumen and thoroughly beat up light. Then add 2 ounces of vanilla flavor, and during the cold weather months you may add a little hot wateh if the batch is too stiff to cast by depositor. Then cast in square shape drop mould and cast the marshmallows in warm starch. Then let stand for 2 days in the coolest part of the room.

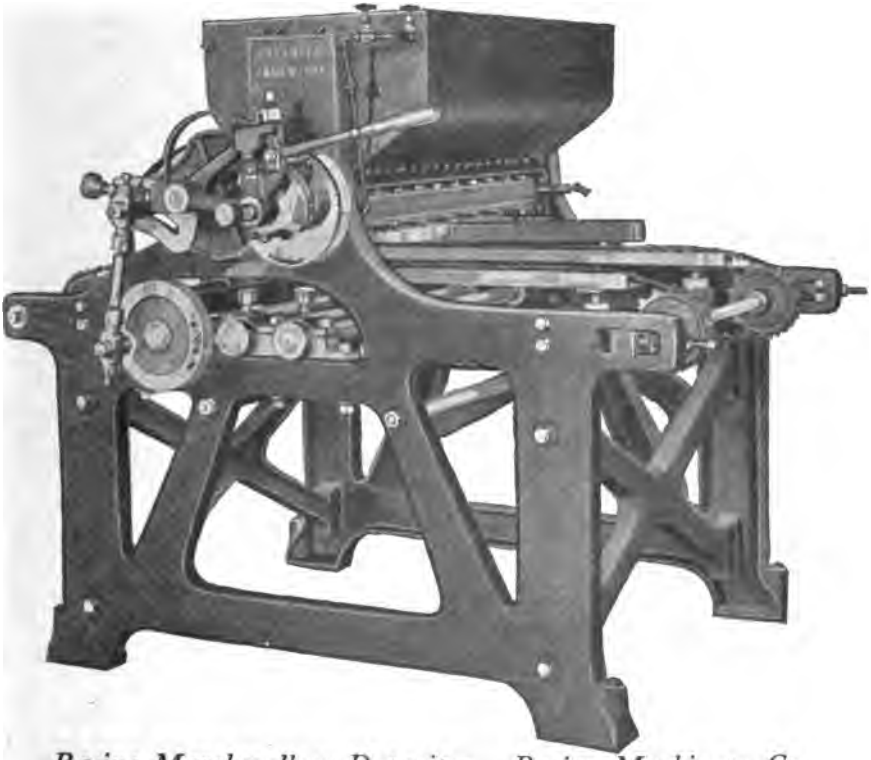
As soon as the marshmallows are casted by depositor machine they should be dusted with warm starch on the top, so as to keep them from having a shine on the marshmallows, otherwise, if you do not sieve starch over the marshmallows as soon as they are casted, the marshmallows will stick when packed in boxes.



Mills Bros.' Marshmallow Kettle.

5-LB. BOX GOODS, OR 400 COUNT

Soak over night 1 lb. of egg albumen in 1 quart of water. Then soak 1 lb. of fast setting gelatine in 1 gallon of water for 1 hour Then place your soaked gelatine in your melting kettle and dissolve, and as soon as the gelatine is dissolved add 21 lbs. of sugar and thoroughly dissolve the sugar in the gelatine water, but do not let the gelatine and sugar come to a boil. Then add 7 lbs. of corn syrup and mix thoroughly, then place in beater and beat up very light. Then, when your batch is beaten up light add the 1 quart of disolved egg albumen and beat up, then heat up in melting kettle just lukewarm, 22 lbs. of corn syrup and thoroughly beat this corn syrup up light in your batch, then add 3 ounces of vanilla flavor and cast by depositor in warm starch.



Racine Marshmallow Depositor. Racine Machinery Co., Racine, Wis.

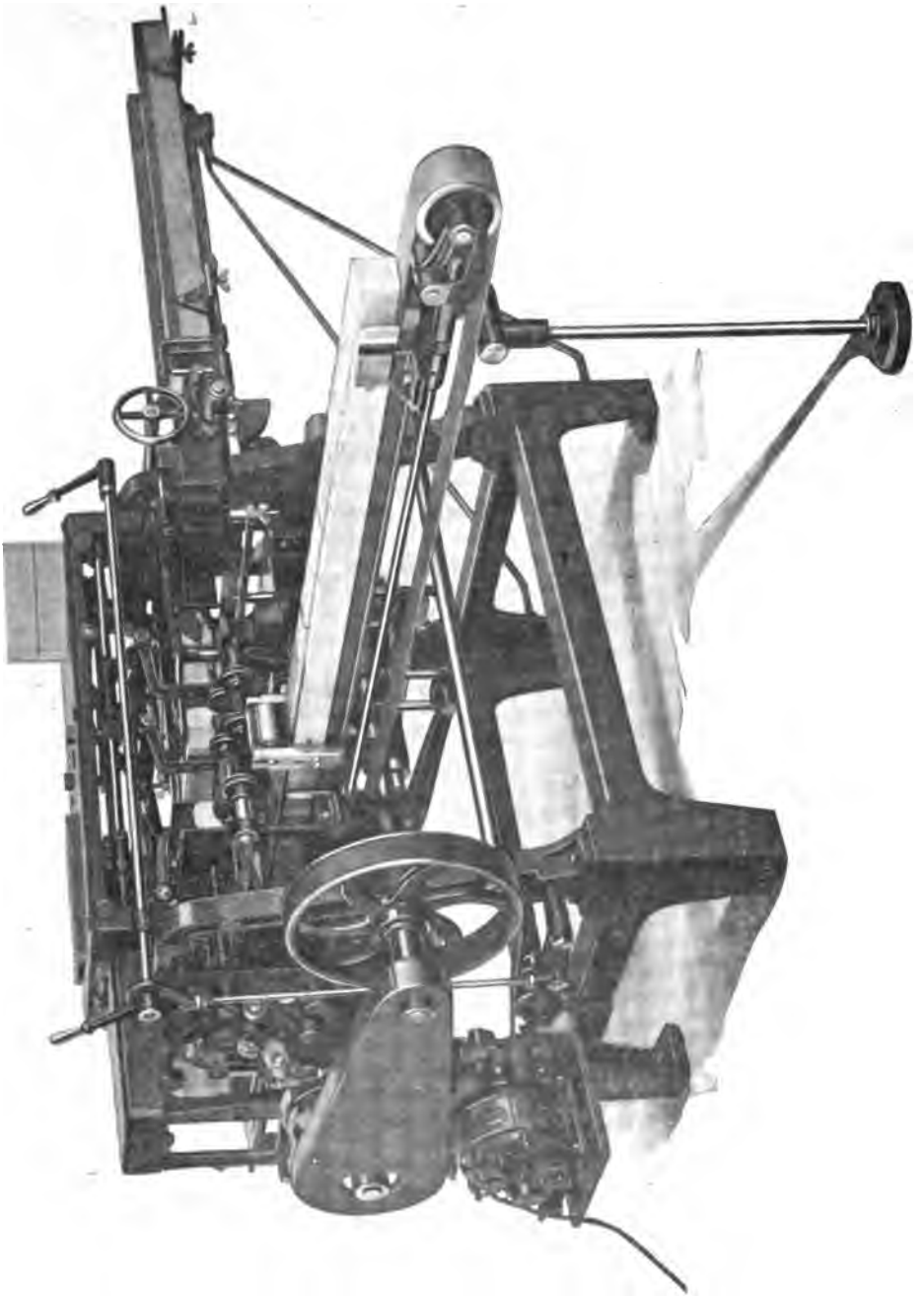
MARSHMALLOW DROPS FOR PACKAGES

Soak 1 lb 10 ounces of fast setting gelatine in 6 quarts of water for 1 hour. Then place in melting kettle and dissolve, then add 20 lbs. of granulated sugar and thoroughly dissolve the sugar in the gelatine Then add 5 lbs. of corn syrup and mix thoroughly, then place in marshmallow beater and beat up very light, then add 25 lbs. of corn syrup that is heated only lukewarm, and beat up very light, then add 3 ounces of vanilla flavor and pour in depositor machine and cast in warm starch, then sieve starch over the top of the marshmallow, then place in cool part of the room and let stand in starch for 2 days, then take out of starch and throw in starch and powdered sugar and let lay in sugar and starch for 30 minutes, then pack in small cartons and a layer of wax paper between each layer and dust each layer with some powder starch and sugar.

In using the powder sugar and starch for packing marshmallows, use one-quarter powder sugar and three-quarters powder starch and mix together. Do not use warm starch for packing or dusting the layers of marshmallows in the cartons.

Then, after the marshmallows are packed in the shells, wrap the shells by wrapping machine with printed wrappers. This wrapping machine wraps the package in wax paper and it is hermetically sealed by heat, which protects the marshmallows against dampness or air.

The waxed paper is fed from the roll. The package to be wrapped is fed from a conveyor and the wrapped packages are discharged upon a conveyor where the packages are ready to be placed in container.



Machine for Wrapping Marshmallow Cartons in Wax Paper. Package Machinery Co., Springfield, Mass.

MARSHMALLOW DROPS FOR BOX GOODS

Soak 1 lb. 4 ounces of gelatine in 1 gallon of water for 1 hour Then soak 1 lb. of egg albumen in 1 quart of water over night. Soak 8 ounces of Jap gelatine in 1 2-3 gallons of water for 1 hour. Now cook in the melting kettle your Jap gelatine with 1 2-3 gallons of water and cook this Jap gelatine until it is thoroughly dissolved, then add 23 lbs. of sugar and 7 lbs. of corn syrup and cook this batch until it strings from a paddle like jelly work. Then turn off the steam and pour into the marshmallow beater and add the 1 lb. and 4 ounces of gelatine that has been soaked in 1 gallon of water and start the beater going and beat up light. Then add the dissolved egg albumen and beat thoroughly and then add 18 lbs. o fcorn syrup and beat up thoroughly until light. Then flavor with 3 ounces of vanilla flavor and cast by machine in warm starch. Let stand for 2 days, then take out and pack in boxes dusted with powder sugar and starch

CHOCOLATE COATED MARSHMALLOW DROPS

Soak 1 lb. 12 ounces of gelatine in 1½ gallons of water for 1 hour. Then place in melting kettle and dissolve, then add 20 lbs. of sugar and 5 lbs. of corn syrup and thoroughly dissolve the sugar, but do not let the gelatine boil. Then pour in marshmallow beater and beat up very stiff and light, then add 25 lbs. of corn syrup that is heated lukewarm and beat the batch thoroughly till light. Then pour in depositor machine and cast in hot starch and let stand for 2 days. Then take out of starch and dip in chocolate on the enrober machine. Add 3 ounces of vanilla flavor to the batch before pouring into the depositor machine.

MARSHMALLOW PENNY GOODS

MARSHMALLOW BANANAS PACKED 100 COUNT TO BOX

Soak 1½ lbs. of gelatine in 11 lbs. of water for 1 hour.

Then place in melting kettle and dissolve the gelatine. Now add 30 lbs. of granulated sugar and 5 lbs. of corn syrup and thoroughly dissolve the sugar, then pour into beater and beat up very light. Then add 15 lbs. of corn syrup that is heated up lukewarm in the melting kettle, then beat the batch very light, then add half an ounce of banana flavor and color the marshmallow a light orange color, then cast by depositor in hot starch and sieve hot starch over the top of the marshmallows and let stand in starch for 2 days, then run through the starch buck and brush the starch from the marshmallow bananas, then pack in boxes, 100 count.

MARSHMALLOW PEANUTS

Soak 1½ lbs. of gelatine in 12 lbs. of water for 30 minutes. Then place in the melting qettle and dissolve the gelatine, but do not let the gelatine come to a boil. Then add 30 lbs. of sugar and 5 lbs. of corn syrup and thoroughly dissolve the sugar in the gelatine water. Then pour into marshmallow beater and beat up very light and stiff. Then add 15 lbs. of corn syrup that is heated hot, then pour this hot corn syrup into the beaten batch, then mix thoroughly. Then color the batch a light orange color and flavor with banana flavor. Then cast in hot starch by depositor machine and sieve hot starch over the marshmallow peanuts as soon as they are casted in starch, then place them in some dry place in the room, away from the steam kettles; then let stand for 2 days, or until the marshmallow peanuts have a dull looking color or grained off. If they are taken from the starch before they are grained off they will stick when packed up in barrels. If you want them very dry, sieve a little powder sugar in the beaten batch just before the batch is placed in the hopper of the depositor, which will start them to grain off by next day, and you must use a peanut shape mould for casting the marshmallow in. These

marshmallow peanuts are a staple article and are cold to all the jobbers of the country.

ASSORTED MARSHMALLOW PENNY GOODS

Soak 1½ lbs. of gelatine in 12 lbs. of water for 1 hour, then place in melting kettle and dissolve the gelatine. Now add 33 lbs. of granulated sugar and 7 lbs. of corn syrup and thoroughly dissolve the sugar, then pour into the beater and beat the batch very light. Then add 15 lbs. of corn syrup that is heated lukewarm and beat the batch up light, then flavor and color for the different designs casted in starch.

MARSHMALLOW PENNY EGGS FOR THE PANS

Soak 1½ lbs. of gelatine in 12 lbs. of water for 1 hour. Then place in melting kettle and dissolve the gelatine, then add 33 lbs. of granulated sugar and 8 lbs. of corn syrup and pour into marshmallow beater and beat up stiff and light. Then place in the melting kettle 12 lbs. of corn syrup and heat this corn syrup hot, then add this hot corn syrup to the beaten batch of marshmallow and beat in thoroughly, then add 3 ounces of vanilla flavor, then pour in depositor machine and cast in egg shape moulds, then let stand for 2 days, then take out of starch and stick the two halves together. Then they are ready to be given a wetting with gum arabic and granulated sugar, then run up in the revolving pans in assorted colors and flavors.

MARSHMALLOW BIRD EGGS FOR THE PANS

Soak 1 lb. 4 ounces of gelatine in 11 lbs of water for 1 hour. Then place in melting kettle and dissolve the gelatine, then add 30 lbs. of granulated sugar and 5 lbs. of corn syrup and thoroughly dissolve the sugar, then pour in beater and beat up very light and stiff, then add 15 lbs. of

corn syrup that is heated to the boiling point and pour in the beaten batch, then mix thoroughly and add 5 lbs. of fondant cream that is melted thin enough to cast, and only mix this melted fondant into the beaten marshmallow, then flavor with 3 ounces of vanilla flavor and cast in hot starch, then let stand for 2 days, then take out of starch and run them up in the pans different colors and flavors.

MARSHMALLOW IMPERIALS FOR PANS

Soak 1 lb. of gelatine in 10 lbs. of water for 1 hour. Then place in melting kettle and dissolve the gelatine, then add 30 lbs. of granulated sugar and 6 lbs. of corn syrup and thoroughly dissolve the sugar, then pour in the marshmallow beater and beat up very light, then add 15 lbs. of corn syrup that is heated to the boiling point and pour into this beaten batch and beat the batch thoroughly and flavor with 2 ounces of vanilla flavor, then cast in a small drop shape mould in hot starch and let stand for 2 days, then run up in the revolving pans and finish assorted colors and flavors.

MARSHMALLOW CHOCOLATED COATED EASTER GOODS

Packed in boxes, 100 count.

Soak 1½ lbs. of gelatine in 14 lbs. of water for 1 hour. Then place in the melting kettle and dissolve the gelatine. Now add 25 lbs. of granulated sugar and 7 lbs. of corn syrup and thoroughly dissolve the sugar, then place in beater and beat up very light, then add 18 lbs. of corn syrup that is heated only, and pour into this beaten batch, then beat up light, then flavor with 3 ounces of vanilla flavor and then cast by depositor machine in egg shape mould and cast in hot starch. Let stand for 2 days, then stick together and dip on the enrober dipping machine.

MARSHMALLOW BAR SPECIALTIES

WALNUT FLUFF BAR, PACKED 24 COUNT

Soak 1 lb. 10 ounces of gelatine in 12 lbs. of water for 1 hour. Then place in melting kettle and dissolve the gelatine, then add 25 lbs. of granulated sugar and 7 lbs. of corn syrup and thoroughly dissolve the sugar, then pour in marshmallow beater and beat up very light and stiff, then add 18 lbs. of corn syrup that is warm, and beat thoroughly in the batch till light; then add 3 ounces of vanilla flavor, then pour in depositor machine, which must have special pump for depositing this style of goods, on account of the large size pieces, as the ordinary pump for the casting drops cannot be used for Marshmallow patties or bar goods, as any house who specializes on bar goods it will pay them to have extra pumps made for casting this class of work, as all the goods are more uniform in size and weight.

If you do not have the extra pumps for this class of work you will have to use the funnel dropper with an outlet at the bottom with a 6-8 inch hole, and will have to be forced out with a stick.

Now, regardles of whether they are casted by hand or machine, the marshmallow must be casted in hot starch, and use a large round pattie shape mould. The girls should drop a few walnut pieces in each impression, then cast the marshmallow on top of these walnut pieces, so when they are taken out of the starch after 2 days the goods when dipped on the enrober dipping machine in thin coating, the top of the pattie will show up rough. Or you can dip them in chocolate coating that contains ground walnuts, then you will not have to drop any nut meats in the starch. Then wrap in wax papers and foil paper that is printed with your trade mark. Then pack 24 to carton.

CHERRY FLUFF MARSHMALLOW BAR

Soak 1 lb. 10 ounces of gelatine in 12 lbs. of water for 1 hour. Then place in melting kettle and dissolve, then add 25 lbs. of granulated sugar and 7 lbs. of corn syrup and thoroughly dissolve the sugar, then pour in beater and beat up very light and stiff. Then add 20 lbs. of corn syrup that is heated only, and pour in the beaten batch and finish beating the batch till very light. Then color the batch a pink color and add 2 ounces of cherry flavor and 2 lbs. of ground glazed cherries and mix through the batch. Then cast in hot starch and let stand for 2 days, then dip in thin chocolate by the enrober dipping machine.

You can make the marshmallow white and pink in the bar, and only use cherries in the pink part. Cast half of the bar white, then color the rest of the batch and add the cherries. Then cast the pink batch on the white.

PEANUT MARSHMALLOW BAR

Soak 1 lb. 10 ounces of gelatine in 11 lbs. of water for 1 hour. Then place in melting kettle and dissolve, then add 25 lbs. of sugar and 10 lbs. of corn syrup and thoroughly dissolve the sugar. Then place in beater and beat up very light and stiff, then add 20 lbs. of corn syrup that is heated only, and beat the batch up light and stiff. Then add 3 ounces of vanilla flavor and cast in hot starch. Then have the girls drop peanuts that are roasted, in the impressions, and then cast the marshmallow on top of the peanuts. Then let stand for 2 days, then dip in thin chocolate on the enrober dipping machine.

CARAMEL MARSHMALLOW BAR

Soak 1 lb. 10 ounces of gelatine in 11 lbs. of water for 1 hour. Now cook caramel part in steam stirring kettle.

Place 20 lbs. of corn syrup, 12 lbs. of sugar, 10 lbs. of

condensed milk, one-half pound of Nucco butter, and cook this batch to a stiff ball when tried in cold water. Then add 2 ounces of vanilla flavor and 1 ounce of salt. Then cast in a bar shape mould a very thin layer of caramel, just so that the bottom of the mould is covered.

After you have casted the caramel in the moulds, then place the soaked gelatine in the melting kettle and dissolve the gelatine. Then add 25 lbs. of granulated sugar and 7 lbs. of corn syrup and thoroughly dissolve the sugar. Then pour into marshmallow beater and beat the batch very stiff and light. Then flavor the batch with 3 ounces of vanilla flavor, then cast on top of the caramel, then let stand in starch for 2 days. Then dip in chocolate on the enrober dipping machine. Then wrap in wax paper and then in foil paper and pack 24 bars to a box.

MARSHMALLOW SANDWICHES

Soak 1 lb. 8 ounces of gelatine in 12 lbs. of water for 1 hour. Then place in melting kettle and dissolve the gelatine, then add 24 lbs. of granulated sugar and 8 lbs. of corn syrup and thoroughly dissolve the sugar. Then pour in beater and beat up very light and stiff, then add 20 lbs. of corn syrup that is heated hot and finish beating batch until light. Then add 3 ounces of vanilla flavor and cast in a very thin, flat round shape mould about 3¼ inches through, then let stand for 2 days, then they are ready to be made into sandwiches.

The day before the sandwiches are ready to be taken out of the starch make a batch of jelly for center for sandwiches.

JELLY MADE FOR CENTER FOR SANDWICHES

Soak 6 ounces of Jap gelatine in 1½ gallons of water for 1 hour. Then place in steam cooking kettle and cook the

Jap gelatine until thoroughly dissolved. Then add 10 lbs. of sugar and 8 lbs. of corn syrup and cook till the batch strings from a paddle. Then let cool for 1 hour in kettle, then flavor with one-quarter ounce of lemon, then pour in starch tray lined with manilla paper, then let stand until next day; then it is ready to be cut in very thin slices to be used for the center of the marshmallow. Take the marshmallow piece and fold it over, then lay a very thin slice of jelly between each sandwich; then they are ready to be dipped in thin chocolate on the enrober machine. Pack 24 to box, and do not wrap this piece.

MAPLE PECAN CAKE

Soak 1 lb. 8 ounces of gelatine in 12 lbs. of water for 1 hour. Then place in melting kettle and dissolve the gelatine. Then add 20 lbs. of sugar and 7 lbs. of corn syrup and thoroughly dissolve the sugar. Then pour in beater and beat up very light and stiff, then add 18 lbs. of corn syrup that is heated and finish beating the batch until light, then add 5 lbs. of maple fondant cream that is melted and 1 ounce of maple flavor. Then mix the fondant thoroughly through the batch, then cast in hot starch and have the girls drop pecan pieces in the moulds before casting the marshmallow in the starch. Then let stand in starch for 2 days, then take out and dip in thin chocolate on the enrober machine.

CHOCOLATE CREAM MARSHMALLOW CAKE

Place 35 lbs. of cream fondant in the melting kettle and heat hot enough to cast, then add 12 lbs. of special fondant and mix thoroughly with enough heat so that it is thin enough to cast. Then add 4 lbs. of powder cocoa and mix thoroughly and one-half pint of water in the cream that is melted. Then cast a thin layer of this chocolate cream in

the mould, just so that it covers the bottom of the moulds. Then cast the balance of the mould with marshmallow.

MARSHMALLOW MADE FOR CHOCOLATE CREAM CAKE

Soak 1 lb. 8 ounces of gelatine in 11 lbs. of water for 1 hour. Then place in melting kettle and dissolve the gelatine. Then add 23 lbs. of sugar with 7 lbs. of corn syrup and thoroughly dissolve the sugar. Then pour in marshmallow beater and beat up very light and stiff. Then add 20 lbs. of corn syrup that is heated, and finish beating the batch very light, then add 3 ounces of vanilla flavor, then cast on top of the chocolate cream in the mould. Let stand for 2 days, then dip in thin chocolate on the enrober machine.

MARSHMALLOW NOUGAT CAKE

Nougat Part: Melt in melting kettle 30 lbs. of fondant cream thin enough to cast, then add 15 lbs. of special nougat fondant and mix thoroughly with enough heat so that it will be thin enough to cast, then add one-half pint of water and mix in so as to thin the nougat fondant. Then add 1 lb. of roasted ground almonds and 2 ounces of vanilla flavor, then cast just enough of this nougat to cover the bottom, then fill the balance of the mould up with marshmallow.

Marshmallow made for Nougat Cake: Soak 1 lb. 8 ounces of gelatine in 11 lbs. of water for 1 hour. Then place in melting kettle and dissolve the gelatine. Then add 25 lbs. granulated sugar with 7 lbs. of corn syrup and thoroughly dissolve the sugar, then pour in beater and beat up very stiff and light, then add 18 lbs corn syrup that is heated and pour in the beaten batch and beat up very light. Then add 3 ounces of vanilla flavor, then cast in mould on top of the nougat cream. Let stand in starch for 2 days, then dip in thin chocolate on the enrober machine.

CLUSTER PATTIES

Soak 1½ lbs. of gelatine in 12 lbs. of water for 1 hour. Then place in melting kettle and dissolve the gelatine. Then add 23 lbs. of granulated sugar with 7 lbs. of corn syrup and thoroughly dissolve the sugar, then pour in beater and beat the batch up very light and stiff. Then add 20 lbs. of corn syrup that has been heated lukewarm and pour in the beaten batch, then finish beating the batch until light enough to cast. Then flavor with 3 ounces of vanilla flavor, then cast in half round patty mould. Let stand for 2 days, then dip in thin chocolate on the enrober machine, then have the chocolate girls dip a small peanut cluster, and place on top of the marshmallow dipped patties.

MARSHMALLOW CUT GOODS

WALNUT TOP BAR

Soak 1 lb. 10 ounces of geltaine in 12 lbs. of water for 1 hour. Then place in melting kettle and dissolve the gelatine. Then add 22 lbs. of granulated sugar with 8 lbs. of corn syrup and thoroughly dissolve the sugar, then pour in beater and beat up very light and stiff, then add 20 lbs. of corn syrup that is heated lukewarm and finish beating the batch up very light, then add 3 ounces of vanilla flavor and pour out on wooden trays lined with manilla paper, with the rods the thickness of the bar, or use six-eighths inch rods, and sprinkle the top of the batch with walnuts. Then let stand until next day. Turn the tray and marshmallow over on another tray that is dusted with starch, then soak the paper with a wet cloth, then peel the paper from the marshmallow, then rub some starch over the marshmallow where the damp paper came off, then mark in bars 3¼ by 1½ inches, then let dry over night in trays, then dip on the en-

rober machine in thin chocolate. In the warm weather you must let your bars dry longer than in the cool weather, for when marshmallow bars are dipped with too much moisture in the bars they will ferment or swell and burst the chocolate coating.

COCOANUT BAR

Soak 1 lb. 10 ounces of gelatine in 12 lbs. of water for 1 hour. Then place in melting kettle and dissolve the gelatine. Then add 25 lbs. of sugar with 6 lbs. of corn syrup and thoroughly disolve the sugar, then pour in beater and beat the batch up very light and stiff. Then add 19 lbs. of corn syrup that is heated lukewarm and pour in the beaten batch and finish beating the batch very light and stiff. Then add 3 ounces of vanilla flavor and pour out on trays lined with manilla paper, then sprinkle thread cocoanut over the top of the marshmallow and let stand till next day, then soak the paper off the marshmallow and mark in bars. Then cut and let dry in trays over night, then dip in thin chocolate on the enrober dipping machine.

BRAZIL MARSHMALLOW BAR

Soak 1 lb. 10 ounces of gelatine in 11 lbs. of water for 1 hour. Then place in melting kettle and dissolve the gelatine, then add 23 lbs. of sugar and 6 lbs. of corn syrup and thoroughly dissolve the sugar. Then pour in marshmallow beater and beat up very light and stiff. Then add 21 lbs. of corn syrup that is lukewarm, and finish beating the batch until very light and stiff. Then add 2½ ounces of vanilla flavor and then pour out on trays lined with manilla paper. Then sprinkle the top of the marshmallow with crushed Brazil pieces. Then let stand over night; then, next day, soak the paper from the marshmallow and dust the batch with starch, then mark in bars and cut; then place in trays to dry over night, then dip on the enrober dipping machine.

MAPLE PECAN BAR

Soak 1 lb. 10 ounces of gelatine in 11 lbs. of water for 1 hour. Then place in melting kettle and disolve the gelatine. Then add 20 lbs. of granulated sugar with 7 lbs. of corn syrup and thoroughly dissolve the sugar, then pour in beater and beat up very stiff. Now cook 5 lbs. of maple sugar with 1½ gallons of water. Cook to 236 degrees and pour this cooked maple sugar into the batch and 18 lbs. of corn syrup and thoroughly beat the batch up light and stiff. Then add just enough of burnt sugar color to give it a light maple color, then add 1 ounce of maple flavor. Then pour out on trays lined with manilla paper, then sprinkle the top of the marshmallow with crushed pecan pieces, then let stand over night. Then next morning soak the paper off, then dust the batch with starch, then mar kin bars, then let dry in trays over night. Then dip in thin chocolate on the enrober machine.

MARSHMALLOW FRUIT BAR

Soak 1 lb. 10 ounces of gelatine in 11 lbs of water for 1 hour. Then place in melting kettle and dissolve the gelatine. Then add 25 lbs. of granulated sugar with 7 lbs. of corn syrup and thoroughly dissolve the sugar. Then pour in beater and beat the batch up very light and stiff. Then add 20 lbs. of corn syrup that is heated lukewarm and beat the batch up very light and stiff, then add 3 ounces of vanilla flavor, and then pour out on trays lined with manilla paper. Then sprinkle the top of the marshmallow with pineapple glaze fruit and glaze cherries that are cut up in very small pieces, then let stand over night, then next morning soak the paper off the marshmallow and dust the bottom of the batch with starch and mark the side of the marshmallow that does not contain the fruit, and when cutting the marshmallow cut with the fruit down. Then place in

trays and let dry over night; then, when dry, dip on the enrober dipping machine.

VANILLA AND CHOCOLATE BAR

Soak 1 lb. 10 ounces of gelatine in 11 lbs. of water for 1 hour. Then place in melting kettle and dissolve the gelatine. Then add 23 lbs. of granulated sugar with 8 lbs. of corn syrup and thoroughly dissolve the sugar. Then pour in beater and beat up very light and stiff, then add 18 lbs. of corn syrup that is warm and pour in the batch and finish beating the batch until it is very light and stiff. Then add 3 ounces of vanilla flavor. Then pour out half of the batch on trays lined with paper about one-quarter inch thick; then color the rest of the batch with 3 lbs. of cocoa powder and mix thoroughly, then pour this chocolate colored batch on top of the white vanilla batch and spread about half an inch thick. Then dip in thin chocolate that has ground roasted almonds when the bars are dry enough to dip.

CRYSTALLIZING WORK

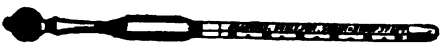
CRYSTALLIZING AND THE COOKING OF CRYSTAL SYRUP

In cooking sugar to be used for crystallizing work use only the cane sugar for this class of work.

In cooking syrup for crystallizing, the higher you cook the syrup the coarser crystal your goods will have, and the lower you cook the syrup the finer the crystal your goods will have; but if you cook the syrup below 33 degrees on the syrup gauge your goods will get soft and sticky, as the goods will not take a crystal at all.

When you purchase a crystal gauge always try out your gauge to see if the gauge will register right, by placing the

gauge in a pail of water, and if the gauge stands at the zero mark line on the gauge when standing in the water your gauge is registering right, and if the syrup gauge registers below or above the zero mark then your gauge is registering wrong and should not be used, as it will cause you a lot of trouble in cooking the syrup for the different goods to be crystallized.



Syrup Gauge for Cooking Crystal Syrup.

In cooking the crystal syrup place the water in your steam kettle, then the sugar, and the quicker crystal syrup is cooked the better results you will have on your crystallized goods. The least grain or sugar on the sides of your kettle when cooking your syrup will cause the crystal to grain.

Goods that are to be crystallized should be placed in some part of the room that has no heavy machinery going, as the shaking of the floor will spoil the crystal while setting in the pans. Crystal pans should be cleaned for a fine crystal, but for cream mixtures and gum work they can be scraped and let dry, then they can be used without washing them.

CRYSTAL SYRUP

Cook in steam kettle 200 lbs. of sugar with 16 gallons of water, and as soon as the batch comes to a boil skim the top of the syrup with a fine skimmer. Then take your tin holder and dip down into the syrup and fill the holder up with syrup, then place your syrup gauge in the holder that contains the syrup and your syrup should register 32 degrees. If it registers more than 32 degrees you will have to add a little water. Then start the batch cooking with a steamer or cover on the kettle, so that your kettle will

steam all the sugar from the sides. If the kettle still shows signs of sugar you must take a brush and wash the sugar down by dipping the brush in cold water, then rubbing the sugar from the sides of the kettle. Then cook the syrup to 33½ degrees for cream work or French cream mixtures and 34 degrees for gum work.

Then pour out in tin tubs to cool, and should be put on the goods only lukewarm.

In using the crystal pans when your crystal is cooked and let stand until lukewarm. Have the crystal pans filled about two-thirds full of the goods to be crystallized, and then fill the pan with the syrup so that the syrup covers the goods, then have wire screens to lay over the top of each pan, then stack up about 5 high and let stand until next morning, then next morning drain the syrup from the goods into tubs, and this syrup can be cooked over again by using half sugar and half of the used crystal syrup.

When draining your pans use the wire screens to keep the goods from sliding out when stacking in the crystal trough, then let them drain thoroughly, then spread out in trays lined with wax paper or trays with screen bottoms.

In the cold weather your crystal room should be heated to about 80 degrees, so that your goods will dry thoroughly, as when the goods dry slowly they have a dull appearance. Always see that your goods are dry before being packed in pails or boxes.

In crystallizing on a large scale you should have a large sheet iron tank holding about 200 gallons of syrup. Then place wire baskets filled with the goods to be crystallized, creams or gums, and fill the baskets two-thirds full of goods, then place one row of wire screen baskets on top of each other until you have the baskets stacked as high as your batch of syrup will cover them. When your batch of syrup is cooked it will have to let in a receiving tank, where it is

cooled until lukewarm only. This receiving tank should have coils of pipe with cold water running through the pipes to cool the syrup. Then, after the syrup is cooled, the syrup should be let into the crystallizing tank which contains the wire baskets, and the syrup must be let in from the bottom, so that the syrup starts to cover the baskets from the bottom. Then let the goods stand in the syrup for 8 hours. Then open the bottom valve and drain the syrup from the baskets with a rotary pump, then let stand until the goods are drained well, then spread out on tables lined with paper, then, when dry, pack in pails or boxes.

This syrup can be used over again with half sugar, or can be used in the manufacture of fondant creams for chocolate work, and when used for the manufacture of fondant cream use at the rate of 75 lbs. of sugar to every 100 lbs. of crystal syrup.

CREAM MIX SPECIALTIES FOR PAILS

FONDANT CREAM TO BE USED IN THE MANUFACTURE OF CREAM MIXTURES

Cook in steam kettle 100 lbs. of cane sugar, 25 lbs of corn syrup with 3½ gallons of water and cook this batch to 240 degrees on cooking gauge. Then pour out on ball beater and let get partly cool, then start to cream the batch to a fondant.

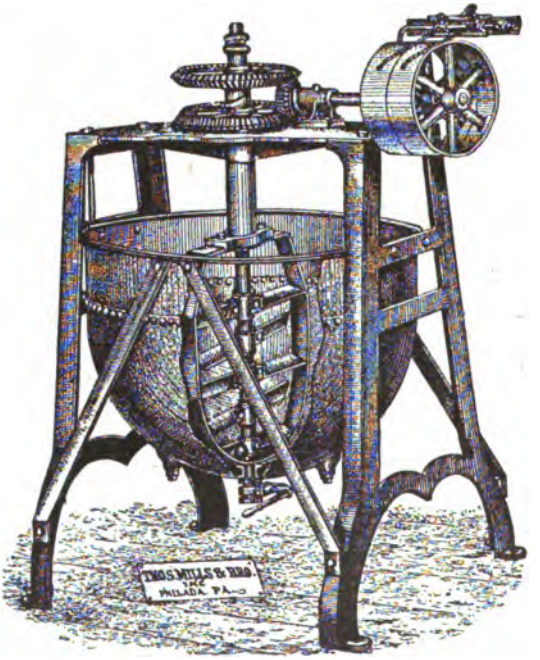
Then as soon as the batch is creamed it is ready to be used as cream fondant that is used the same day that it is made will turn out a whiter and clearer crystallized cream mix than cream that is made up for stock.

SYRUP TO BE USED IN THE MANUFACTURE OF CREAM MIXTURES

Cook in steam kettle 50 lbs. of cane sugar, 12 lbs. of corn syrup, with 1½ gallon. of water. Cook to 245 degrees.

FRENCH STYLE CREAM MIX FOR PAILS

Place 60 lbs. of cream fondant in cream mixing kettle. Then pour syrup that is cooked to 245 degrees into this 60 lbs. of fondant cream and mix thoroughly. Then add a few drops of blue color for the white to bleach out the white cream mix. Then add one-half ounce of oil of peppermint and 3 lbs. of special fondant and mix thoroughly with a little heat on the kettle, but you must not let the batch get too thin or your goods will get hollow when casted in starch. Then pour in depositor and use the 20 pump and heat the hopper on the depositor to 160 degrees, then cast in dry starch. Let stand over night, then take out of starch and then crystallize in syrup at 33½ degrees.



Cream Mixing Kettle for Crystallized Mixtures.

Make this French style mixture in white, mint flavor, yellow use lemon flavor, orange color a light orange and flavor with orange, pink color and flavor with wintergreen flavor, maple color with burnt sugar color and add maple flavor.

Now to make a very pretty mixture for pails make 4 to 5 of the different designs double colors by running the mould half full of white, then fill the balance of the mould colored. Make white and pink, white and orange, white and yellow and white and green.

Then pack in pails when crystallized and top off with crystallized cream strawberries, with stems on a few of the strawberries.

CREAMED STRAWBERRIES FOR TOPPING CREAM MIXTURES

Fondant Cream: Cook in steam kettle 100 lbs. of cane sugar, 30 lbs. of corn syrup, 3 gallons of water. Cook to 240 degrees. Pour out on beater and when partly cool cream to a fondant.

SYRUP FOR CREAM STRAWBERRIES

Cook in steam kettle 100 lbs. of cane sugar, 35 lbs. of corn syrup, 3 gallons of water. Cook to 245 degrees.

Now place the batch of cream fondant in the cream mixing kettle and turn on a little heat to melt the cream. Then, as soon as the cream is soft so that it will mix with stirrer add the cooked syrup and mix thoroughly, then add 3 lbs. of special fondant cream and color the batch a light orange color with 3 ounces of strawberry flavor. Then pour in depositor and cast in a strawberry shape mould. Then let stand over night, then take out of starch and run them up in the revolving pans with a syrup colored a deep rad, and use half dissolved gum arabic and half crystal syrup for

wetting the strawberries, then dry up with granulated sugar. Then place in trays to dry, and then, next day, give them another coat of disolved gum and syrup colored red, and dry up with granulated sugar, then let dry over night in trays, then place in crystal and crystallize them at 33½ degrees.

PEPPERMINT AND WINTERGREEN WAFERS FOR PAIL GOODS

Cook in steam kettle 100 lbs. of cane sugar, 25 lbs. of corn syrup and 3½ gallons of water. Cook to 241 degrees. Then pour out on beater and cream to a fondant when partly cool.

Now place 50 lbs. of this cream into the cream mixing kettle. Then cook a syrup 50 lbs. of cane sugar, 12 lbs. of corn syrup with 1½ gallons of water and cook to 245 degrees. Then pour this cooked syrup into the 50 lbs. of cream fondant in the mixing kettle and mix thoroughly, then add 3 lbs. of special fondant and 1 ounce of oil of peppermint and mix thoroughly.

Then pour in depositor and cast in dry starch in a wafer shape mould and let stand over night. Then take out of starch and spread out on a table to dry, then crystallize in 33½ degree crystal syrup.

For the wintergreen wafers color the batch a pink color and flavor with 1 ounce of oil of wintergreen.

CRYSTALLIZED CONSERVE WORK FOR PAIL GOODS

Cook in steam kettle 100 lbs. of cane sugar, 30 lbs. of corn syrup, with 3 gallons of water. Cook to 245 degrees. Then add 35 lbs. of fondant cream and mix thoroughly, then for the white add a few drops of blue color to bleach out the white. Then make your colors in pink, yellow, orange lavender and flavor the white mint, yellow cinnamon,

orange orange and lavender with violet flavor.

Pour in depositor and cast in small moulds of different designs. Then let stand in starch over night, then when dry, crystallize at 33½ degrees.

Then when thoroughly dry from the crystal, pack in 5-lb. boxes and pails.

COCOANUT WAFERS

Place 40 lbs. of fondant cream in cream mixing kettle. Now cook in steam kettle 50 lbs. of cane sugar, 12 lbs. of white corn syrup, with 1½ gallons of water, and cook to 245 degrees. Then pour this cooked syrup in your mixing kettle that contains the 40 lbs. of fondant cream and mix thoroughly, then add 5 lbs. of macaroon cocoanut and 2 ounces of vanilla flavor. Then add a few drops of blue color for the white, then pour in depositor machine and cast in a wafer shape mould, then let stand in starch over night; then, next day, take out of starch, and when thoroughly dry place in crystal at 33½ degrees.

Make these wafers in white and pink color, and for the pink use brilliant rose color and flavor with wintergreen flavor. Then pack, when crystallized, in 5 lb. boxes in layers, one layer assorted.

CRYSTALLIZED HAND MADE CREAMS

Centers to be dipped in fondant cream. Cream fondant to be used for centers.

Cook in steam kettle 100 lbs. of cane sugar, 10 lbs. of corn syrup, 3½ gallons of water. Cook to 240 degrees, then add 25 lbs. of corn syrup and finish cooking the batch to 240 degrees. Then pour out on ball cream beater, and when partly cool start to cream to a fondant.

Then place 50 lbs. of this fondant cream in the melting kettle and heat hot enough to cast, then add 10 lbs of spe-

cial fondant and mix thoroughly, then add for white center 2 ounces of vanilla; lemon center, 1 ounce of oil of lemon; orange center, 1 ounce of oil of orange; strawberry center, 2 ounces of true fruit strawberry flavor; pineapple center 1 lb. of ground pineapple fritters or fingers; almond paste center, use 3 lbs. of almond paste.

Then cast by depositor machine in different shapes and let stand over night, then take out of starch and dip in hand made fondant cream.

You can also use crushed fruits of all kinds by cooking the crushed fruit down like for chocolate centers.

Centers to be used for hand dips must not be too soft or they will ripen up when placed in crystal.

When heating the cream for these centers heat the cream a little hotter than you do for chocolate cream centers.

You can make these centers of fruit jelly, cocoanut cream center, brazils dipped, walnuts dipped, filberts dipped in two colors. Dip them in white cream then in pink or orange or maple color.

FONDANT CREAM TO BE USED FOR HAND MADE CREAMS

Cook in steam kettle 100 lbs. of cane sugar, 10 lbs. of corn syrup, with 3½ gallons of water. Cook to 242 degrees in warm weather or 241 in cool weather; Then add 15 lbs. of corn syrup and finish cooking the batch to 242 degrees. Then pour out on ball cream beater and when partly cool start to cream to a fondant. Then it is ready to be dipped with.

Cream fondant to be used for dipping should be used up the same day it is made or the cream will have a darker shade color when dipped with next day.

Then after your creams are dipped in fondant cream let stand over night in trays to dry out thoroughly, then crys-

tallize them in crystal syrup at 33½ degrees, and only use a lukewarm crystal on this class of work, or your cream will get too soft.

CREAM EASTER ASSORTMENT

Place in cream mixing kettle 50 lbs. of fondant cream. Now cook a syrup in a steam kettle 50 lbs. of cane sugar, 12 lbs. of corn syrup, 1½ gallons of water. Cook to 245 degrees, then pour this cooked syrup into the 50 lbs. of cream fondant and mix thoroughly. Then add a few drops of blue color for the white and flavor with 2 ounces of vanilla flavor. Then cast by depositor machine in dry starch in small chicken design mould, rooster design mould and rabbit design mould. Make them in two colors, white and pink.

Then let stand in starch over night, then next morning take out and let get thoroughly dry, then place them in crystal at 33½ degrees; then, when drained and thoroughly dry, pack in 5-lb. boxes.

CREAM EASTER EGGS FOR THE PANS

Plaec 50 lbs. of fondant cream in the cream mixing kettle. Now cook a syrup of 50 lbs. of sugar, 25 lbs. of corn syrup, 1½ gallons of water. Cook to 245 degrees. Then pour this cooked syrup into the fondant cream that is in the melting kettle and mix thoroughly, and if it is too thick to cast, heat it hot enough to cast. Then add 10 lbs. of special fondant and 3 ounces of vanilla flavor and mix thoroughly, then pour out into the depositor machine and cast in small egg shape mould and let stand till next day, then take out of starch and run up by the revolving pans and finish in assorted colors, white, pink, yellow and orange.

CREAM EGGS CHOCOLATE COATED, FOR EASTER

Fondant Cream for Cream Easter Eggs: Cook in steam

kettle 100 lbs. of sugar, 30 lbs. of corn syrup, with 3 gallons of water. Cook to 240 degrees, then pour out on cream beater and when partly cool start to cream the batch to a fondant.

Now place 50 lbs. of cream fondant in the cream melting kettle and heat the cream thin enough to cast, then add 15 lbs. of special nougat fondant and mix thoroughly, then add 3 ounces of vanilla flavor and cast in egg shape mould.

Make the sizes of the egg mould so that they can be sold when dipped in chocolate for 5 cents up to one dollar size.

Make the cream center with fruit and nuts of all kinds, and have girls to drop the fruit and nuts in each half; then, next day, take out of starch and have them stuck together, then dip by enrober machine or by hand.

Forthe 10-cent size pack in a small carton, and also the dollar size with white shredded paper.

The 25-cent size egg should be decorated and also the 50-cent and $1 size in white decorated icing or chocolate icing. In dipping the 50-cent and $1 size egg dip each half, then stick them together with chocolate. Then decorate around the border.

The cream used for the large size eggs should be heated hot, so that the cream will set hard, or else the egg when dipped in chocolate will ripen up and burst the coating.

BUTTER CREAM MIXTURES

Fondant cream to be used in butter cream mixtures:

Cook in steam kettle 100 lbs. of cane sugar, 30 lbs. of corn syrup with 3 gallons of water. Cook to 240 degrees, then pour out on ball beater and when partly cool start to cream to a fondant.

SYRUP FOR BUTTER CREAM MIXTURES

Cook in steam kettle 45 lbs. of sugar, 25 lbs. of corn syrup with 1½ gallons of water. Cook to 245 degrees for small

mixtures. Cook to 250 degrees for large penny pieces.

Place in your stirring kettle 30 lbs. of cream fondant, then add the cooked syrup and mix thoroughly, then add 4 lbs. of special fondant cream and mix thoroughly. Then add 12 lbs. of condensed milk and mix the batch, then add 4 ounces of salt and 3 ounces of vanilla flavor. Then pour in depositor and cast in very small butter cream design moulds and use some flower design butter cream moulds.

Cast them in double colors by running them half white and the other half pink, or yellow, orange or chocolate.

This makes a very pretty mix when you run your colors right. Then let your butter creams stand in starch for two days, then take out of starch, and they must be thoroughly brushed so that they do not have any starch on them whatever. Then glaze them with confectioner's white glaze.

To glaze the butter creams, place about 25 lbs. of the mix in a small revolving pan, then start the pan revolving and then pour on a little of the confectioner's glaze and after the glaze is on only let the pan revolve 4 to 5 times around. If you let them run in the pan too long they will get smeared and sticky. Then take out of the pan with a small wire sieve and pour out on wire screens, and in about one hour loosen them up by jarring the trays. Then let stand till dry. Then pack in half pails or 5-lb. boxes.

BUTTER CREAM EASTER EGGS

Place in stirring cream mixing kettle 35 lbs. of fondant cream. Now cook a syrup of 50 lbs. of sugar, 25 lbs. of corn syrup, with 1½ gallons of water. Cook to 250 degrees, then pour this cooked syrup into the 35 lbs. of fondant cream that is in the mixing kettle and mix thoroughly, then add 4 lbs. of special fondant cream, 3 ounces of vanilla flavor and 14 lbs. of condensed milk and 4 ounces of salt and mix. Then have some small egg shape moulds printed

in starch ready. Then pour your batch in depositor machine and cast in your starch impressions.

Then make one batch of white to every batch of color, so that your mixture of eggs will be half white and half colors when mixed. Make for colors pink, chocolate, orange and lemon. Then let them stand in starch for two days, then take out of starch, and see that the eggs are thoroughly brushed clean from starch. Then glaze in small revolving pan and place in trays with wire bottom screen, then in one hour loosen them by jarring the trays. Then let stand until dry, then pack in pails or boxes.

You can spot these cream eggs when thoroughly dry by using a whisk brush, and dip the brush in a thin solution of color, and then have a stick and hit the brush lightly while moving over the tray of eggs. But do not have too much color on the brush, otherwise the spots on the eggs will be too large and they will not show up right. Then let dry over night, then pack in boxes or half pails.

MILK CREAM PENNY GOODS

Place 35 lbs. of fondant cream in mixing kettle. Now cook syrup of 20 lbs. of corn syrup and 45 lbs. of sugar and 5 quarts of water. Cook to 255 degrees. Then pour this cooked syrup in your fondant cream that is in the mixing kettle and mix well. Then add 4 lbs. of special nougat fondant, and when mixed together add 14 lbs. of condensed milk, 4 ounces of salt and 3 ounces of vanilla flavor. Then pour in depositor machine and cast in starch in moulds of basket designs, rabbit designs, and chicken design moulds. Then let stand in starch for 2 days, then take out of starch and brush them thoroughly free from starch. Then glaze them with a brush and have them spread out on wire screen trays, or they can be dipped down in a very thin glaze on wire screen.

MILK CREAM PYRAMIDS

Place 17 lbs. of cream fondant in mixing kettle. Then cook in steam kettle 15 lbs. of corn syrup, 32 lbs. of sugar, 1 gallon of water, 2 lbs. of Nuco butter to 250 degrees. Then pour this cooked syrup into the fondant cream and mix thoroughly, then add 6 lbs. of liquor chocolate that is cut up fine, and then add 11 lbs. of condensed milk, 3 ounces of salt and 2 ounces of vanilla flavor. Then pour in depositor machine and cast in pyramid shape molds, then let stand in starch for 2 days. Then take out of starch and glaze in dark confectioner's glaze.

MILK CREAM CANDY CORN

As this is one of the staple articles sold to the jobbing trade, and is also a very tedious piece of candy to make with only one depositor, as this piece of candy must be casted in three different colors and must be handled three different times, if it is casted with only one depositing machine.

Where you have three depositors going at the same time you will be in position to keep the trays going from one depositor to the other until the piece is finished to represent the grain of corn. The first depositor must contain the white part of the grain of corn. The second depositor must contain the orange part of the grain of corn. The third depositor must contain the yellow to represent the grain of corn.

White batch: Cook in steam kettle 25 lbs. of sugar, 15 lbs. of corn syrup, 3 quarts of water. Cook to 244 degrees. Now place 15 lbs. of fondant cream in the stirring kettle and add 1 lb. of Nuco butter. Then pour this cooked syrup in the fondant cream and mix thoroughly. Then add 8 lbs. of condensed milk and 2 lbs. of special fondant cream and 1 ounce of vanilla fiavor and 1 ounce of salt. Then mix thoroughly. Then pour in depositor machine and cast in

the corn impressions, and in setting the pumps on the depositor you must only cast the mould about one-fifth full for the white part of the grain of corn.

Now for the orange part. Cook in steam kettle 50 lbs. of sugar, 30 lbs of corn syrup, with 1½ gallons of water. Cook to 245 degrees. Now place in stirring kettle 30 lbs. of fondant cream with 2 lbs. of Nuco butter, then pour in the cooked syrup and mix thoroughly, then add 15 lbs. of condensed milk and 4 lbs. of special fondant, 2 ounces of vanilla flavor and 1 ounce of salt. Then color your batch an orange color, then pour in depositor machine and cast the mould two-thirds full.

Now for the yellow part. Cook in steam kettle 35 lbs. of sugar, 15 lbs. of corn syrup, with 1 gallon of water. Cook to 245 degrees.

Now place in stirring kettle 20 lbs. of cream fondant with 1 lb. of Nuco butter, then pour in the cooked syrup and mix thoroughly. Then add 10 lbs. of condensed milk and 3 lbs of special fondant and 1 ounce of salt and one-quarter ounce of lemon flavor. Then pour in depositor and cast on top of the orange color and finish the mould level full. Then let stand in starch for 2 days, then take out of starch, and when thoroughly cleaned from starch glaze with white confectioner's glaze; then, when dry, pack in 5-lb. boxes or half pails.

BUTTER CREAMED ALMONDS

Place 20 lbs. of fondant cream with 10 lbs. of almond paste in stirring mixing kettle.

Now cook by steam kettle 50 lbs. of sugar, 35 lbs. of corn syrup, 1 gallon of water and 1 lb. of butter and 1 lb. of Nuco butter. Cook to 247 degrees. Then pour this cooked syrup into the cream fondant and almond paste and mix thoroughly, then add 3 ounces of vanilla flavor and 2 ounces of salt, then add 8 lbs. of condensed milk and 4 lbs. of special

cream fondant. Then color a light maple color with burnt sugar, then pour in depositor machine and cast in small almond shape mould, then let stand for 2 days in starch, then dip in a milk coating on the enrober machine.

CORDIAL WORK

When cooking cordial work always see that the kettle is steamed well so that there is no grain on the sides of the kettle, or otherwise your cordials will turn to sugar when casted in starch. Never use the last quart of syrup that is left in the kettle, as in dipping the syrup from the kettle it will cause the batch to grain unless you bring it to a boil again.

As soon as the cordials are casted in starch you must sieve starch over the top of them, then let the cordials stand for 5 hours. After the cordials have stood for 5 hours take a tray full of starch and turn the cordials upside down so that they will have an even crystal formed, otherwise your cordials will break on top when taken out of the starch the next day. Then take out very carefully. Then dip in chocolate, or they can be crystallized.

CHOCOLATE DIPPED CORDIALS

Cook in steam kettle 25 lbs. of sugar, 5 quarts of water, one-fifth teaspoon of cream of tartar. Cook to 36½ degrees on crystal gauge. Then flavor and color the syrup, then cast by depostior in starch.

Flavors used for cordials: Quince flavor, strawberry flavor, gooseberry flavor, spearmint flavor, rose flavor, violet flavor.

In casting cordials, if you do not have the depositor machine you must use the 6-spout runner with one-eighth inch outlet. When using large moulds as bottles cook your syrup

for cordial work to 37½ degrees on the crystal gauge.

For cordials that are to be crystallized do not use any cream of tartar.

Color the syrup as soon as the syrup is cooked, and also flavor the syrup as soon as you turn off the steam from the kettle.

ROCK CANDY

How to cook rock candy. Cook in steam kettle 200 lbs. of cane sugar, 7½ gallons of water. Cook to 38 degrees on syrup gauge.

In the manufacture of rock candy, in order to obtain the best results, you must use nothing but pure cane sugar.

Now in order to obtain the fine crystal that is in rock candy you must skim every batch of sugar that you cook, just before it starts to boil in the kettle.

In order to obtain a clear crystal rock candy you must not boil the syrup too long. The syrup should test 35 degrees when it starts to boil, then for a fine crystal cook to 37 degrees, and for a coarse crystal cook to 38 degrees on the crystal gauge. As soon as the syrup starts to boil you must place a steamer or cover on the kettle to steam the sugar from the sides of the kettle, or otherwise your syrup will turn to sugar.

Now before you start to cook the syrup for the rock candy you must have some pans to pour your syrup in which can be made in different sizes. The regular size pan is 8x12 inches, and 8½ inches deep, with the ends of the pans perforated with holes about 1½ inches apart, and in each hole you must thread some cotton twine, as it is on this twine that the crystals will start to form into crystals. As this

twine is threaded through the hole in both ends of the pan you will have to close the holes by placing a paper with some glue on it so that the paper will stick to the pan and seal the holes thoroughly so that the syrup will not leak out from the pans when placed in the dry room.

The paper that is glued on the pans to seal the holes must be thoroughly dry before you place any of the syrup in the pans. Then have tables lined with tin with sides 5 inches high and have these tables in the dry room with the temperature at about 120 degrees. Then pour your syrup in the pans and place 2x4 inch sticks in your table, as for the table being lined with tin with sides 5 inches high that is used in case one of the pans should leak which will catch the syrup from leaking on the floor, and you will not have any waste at all.

When your syrup has been in the dry room for 3 days turn off the steam from the room and open the door and let the room cool down slowly. If you want large rock candy strings you will have to leave the syrup stand for 5 days in the drying room before cooling down. Then, next day, you will have to drain the syrup from the pans and let them drain for one day, then the rock candy strings are taken out by pounding on the sides a little, then cut the strings.

To make the rock candy look smooth like you must wash the rock candy in lukewarm water in the pans before you cut the strings, and to wash the rock candy pour a little lukewarm water in the pans. Then shake the pan a little, then pour the water out and set the pan to drain well; then, when dry, cut the strings, then place in dry room. When thoroughly dry they are ready to pack.

For colored rock candy, color the syrup as soon as the batch is cooked. To bleach the rock candy so that it will look clear, add a few drops of blue color.

PEANUT WORK AND SPECIALTIES

This class of work is turned out by the use of the gas cooking furnace or open fire work. You must have copper kettles of different sizes from 15 to 25-lb. copper kettles, according to the size of batches made. For the wholesale trade the 25-lb. kettle is used and for the retail trade 15 to 20-lb. copper kettle is used for cooking peanut specialties.

You must have a cooking gauge to cook the syrup.

You must have a cooling slab for pouring the batches out on and to cut the batches or spread the peanut work out on.

You should have two adjustable cutters for wholesale work or retail work, on account of cutting the different sizes at the same time, as you cannot stop to change cutters while working with the high cooked batches, on account of the work getting too hard, so that you are unable to cut the batch into bars.

The wholesale confectioners who are selling to the jobbing trade should do their own roasting, as a roasting outfit for roasting the peanuts will pay for itself in a very short time, and as the blanched peanut is used to a great extent in peanut specialties, the wholesale manufacturer should have the roasting outfit and the blancher, and by having the peanut butter mill for making peanut butter he can keep his peanut department going the year around.

PEANUT SPECIALTIES

The Fan Blast Furnace. Manufactured by the Improved Appliance Co., Brooklyn, N. Y.

The unit system of installing the blast confectioners' gas furnaces is the most efficient in a wholesale or retail plant, as there are very few manufacturers who do not have to use at least from 2 to 6 fan blast gas furnaces in turning out the different kinds of specialties.

The best results are obtained by using one blower for each

furnace, or for two furnaces when placed close together.

The majority of the manufacturing confectioners today are using the fan blast gas furnaces for wholesale and retail work and are doing away with the coke furnaces, as the coke furnaces make a candy shop always look dirty on account of handling the coke and starting the fire every morning and cleaning out the ashes. With the fan blast gas furnaces they are always ready when you are and you don't have to stop and build a fire, and you always save a lot of time in not having to wait for your fire to get started. All you have to do is light a match, and you have a strong heat from your furnace.

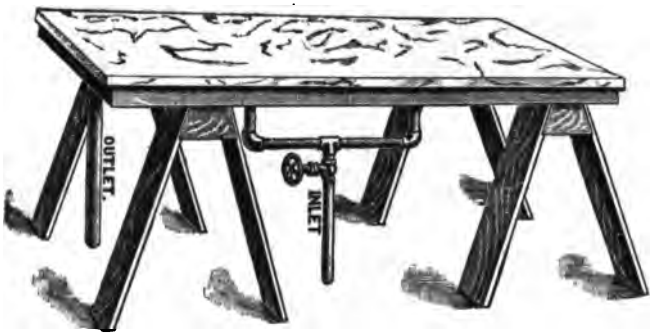
In cooking the batches with the fan blast furnace you always have perfect control of the fire by just closing and opening the gas pressure, and the greatest advantage of gas is that it is clean and sanitary.

PEANUT SLAB OR PEANUT SQUARES

Place in copper kettle and cook on gas furnace 16 lbs. of sugar, with 12 lbs. of corn syrup and one-half gallon of water. Cook to 250 degrees on cooking gauge.

Cooking Gauge.

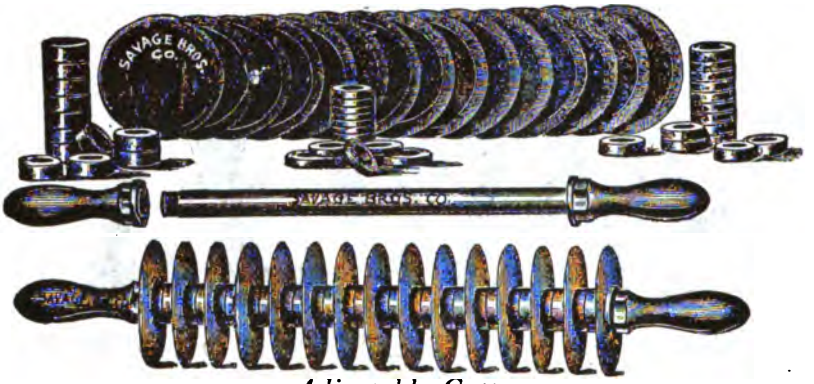
Then take your gauge out from the batch and add slowly 28 lbs. of Spanish No. 1 peanuts, and while adding the peanuts you must stir the batch slowly with a paddle to keep the batch from scorching to the bottom of the kettle. Then let the peanuts cook in the syrup until the peanuts are roasted a light brown color, then your batch is done. Then pour out on the slab that is greased and dusted light with flour, then spread out with a palette knife, then when cool enough cut in slabs to fit the cases , or in squares.



UNWRAPPED PEANUT BAR PACKED 24 COUNT TO CARTON

Place in copper kettle and cook on gas furnace 14 lbs. of sugar, 12 lbs. of corn syrup, with one-half gallon of water. Cook to 248 degrees, then take the cooking gauge out of the batch and add slowly 30 lbs. of Spanish No. 1 peanuts and stir the batch slowly while adding the peanuts until you have all the peanuts in the batch, then let the peanuts cook in the syrup until the peanuts are roasted a light brown color, then turn off the gas and add 1 ounce of salt. Then pour out on greased slab that is dusted light with flour, then, as soon as you can handle the batch, fold the batch up with a large knife or a flat mixing iron rod, then fold the batch up about three times. That will mix the syrup through the peanuts and will make the peanut bar eat more brittle. Then take the rolling pin and roll the batch down to the thickness you want for the bar. You can make a thin bar or a thick bar, about one-half an inch thick, 3¼ inches long and 1½ inches wide.

In rolling the peanut goods you must not let the goods get too cold before rolling the batch, or else you will crush the peanuts when rolling the batch down to the thickness of the bar. Then, when you have the batch rolled down to the thickness you want, cut the bars with the adjustable cutters. Then, when cold, pack in cartons, 24 count.



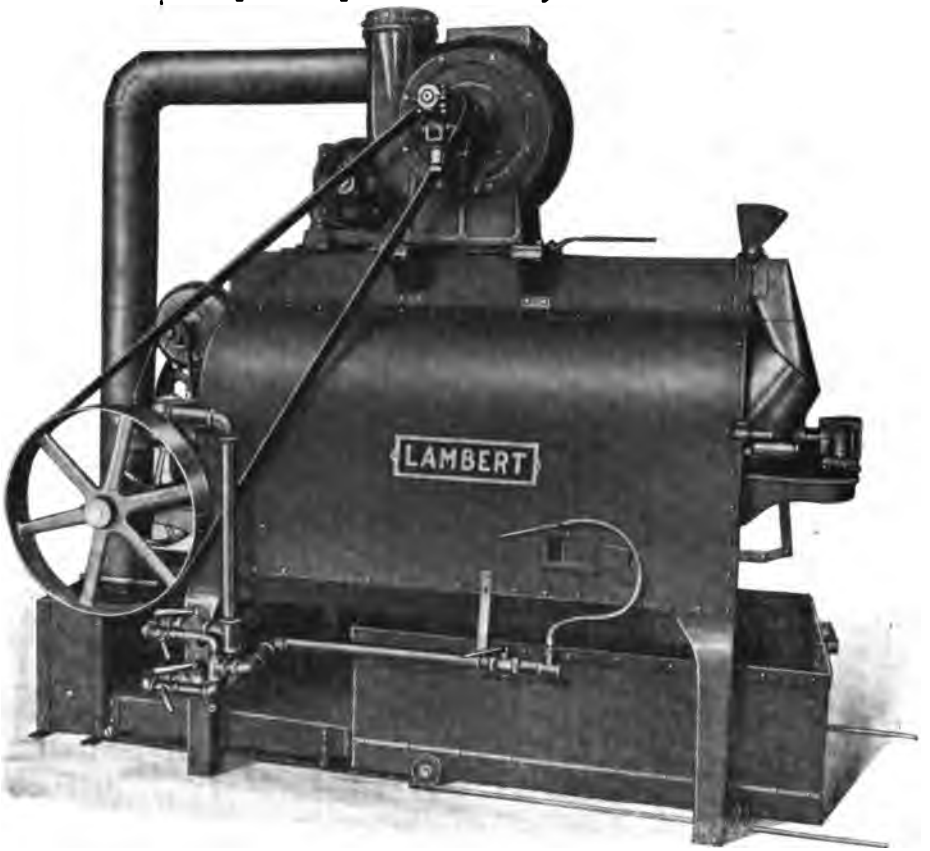
Adjustable Cutters.

UNWRAPPED PEANUT BAR PACKED 100 COUNT

Place in copper kettle on open gas fire 12 lbs. of sugar, 10 lbs. of corn syrup, with 1 quart of water. Cook to 245 degrees. Add slowly 22 lbs. of Spanish No. 1 peanuts and stir in a few of the peanuts at a time, so as to give the syrup time to boil through. For, if you add all the peanuts in the syrup at once, you will not be able to keep the batch from scorching. Then let the peanuts cook in the syrup until the peanuts are roasted a light brown color. Then pour out on a greased slab, and when cool enough to handle, mix in 1 ounce of salt and fold the batch up. Then fold up about three or four times, then roll out about one-quarter inch thick, then cut in penny bars with the adjustable cutters. Then pack in cartons, 100 count.

UNWRAPPED BLANCHED PEANUT BARS, PACKED 24 COUNT

Place 100 lbs. of No. 1 Virginia peanuts in the roaster and give the peanuts a light roast, and in roasting the Virginia peanuts you must be very careful in not letting the peanuts get too dark a color before you take them out of the roaster. They must be only roasted a light brown color, as by the time they are cool they will turn a shade darker in color.

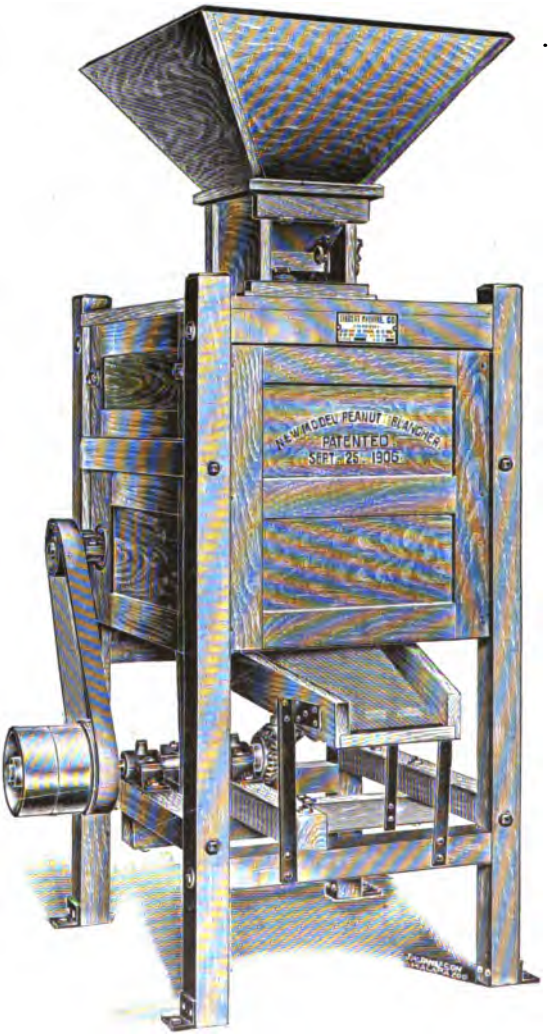


Confectioners' Peanut Roaster. Lambert Machine Co., Marsall, Mich.

The illustration here shows the peanut roaster equipped with the cooling apparatus and also the telescope exhaust connections, also with electric motor attachment.

This style outfit is used extensively by the manufacturing confectioners who make a specialty of roasting peanuts or almonds, to be used in the manufacture of the different peanut specialties or roasted almonds for chocolate dipping.

After the peanuts are roasted a light color, then they are ready to be run through the blanching machine.



Standard Peanut Blancher with Automatic Feeding Apparatus. Lambert Machine Co., Marshall, Mich.

This machine is used for blanching the peanuts after they have been given a light roast, then they are ready to be used in the manufacture of blanched peanut specialties, or for the manufacture of peanut butter or blanched salted peanuts.

UNWRAPPED BLANCHED PEANUT BAR

Place in copper kettle on the open fire 12 lbs. of sugar, 10 lbs. of corn syrup, with one-half gallon of water. Cook to 265 degrees. Then add slowly, with very little heat on the kettle, 26 lbs. of blanched Virginia peanuts and mix the peanuts thoroughly through the syrup. Then pour out on a slab that is greased and dusted with flour. Then spread out and roll down to one-quarter inch thick and cut with adjustable cutter in bars three-quarters inch wide and 3¼ inches long. Then, when cold, pack in cartons, 100 count.

FOR BAR SPECIALTIES PACKED IN CARTONS 24 COUNT

Roll the batch down to one-quarter inch thick and cut with adjustable cutters 1½ inches wide by 3¼ inches long. Then glaze, when cool, with confectioner's white glaze. Then let dry and pack in cartons.

WRAPPED PEANUT BARS PACKED 100 COUNT

Place in copper kettle on the open fire 10 lbs. of sugar, 10 lbs. of corn syrup, with 1 quart of water. Cook to 260 degrees for hot weather, or 255 degrees for cold weather. Then add slowly in the cooked syrup, with very little heat on the kettle, 26 lbs. of blanched Virginia peanuts and mix the syrup through the peanuts. Then pour out on a greased slab dusted with a little flour and a little granulated sugar. Then spread the batch out with your stirring paddle, and then roll down with a heavy rolling pin to one-quarter inch

thick and then cut in bars three-quarters inch wide and 3¼ inches long. Then, when cool, wrap in wax paper, then pack in cartons, 100 count.

For a cheaper grade bar you can use the Spanish No. 2 blanched peanuts.

BLANCHED PEANUT SQUARES FOR CASE GOODS

Place in copper kettle on open fire 14 lbs. of sugar, 11 lbs. of corn syrup, with 1 quart of water. Cook to 270 degrees. Then add slowly 30 lbs. of blanched Virginia No. 1 peanuts and mix through the batch. Then pour out on a greased slab that is dusted with a little flour and granulated sugar, then spread out with stirring paddle and then roll down to one-quarter inch thick, then cut in 1¼ inch squares, then glaze with white confectioner's glaze. Then, when dry, pack in cases, and do not break into squares. Pack in sheets the size of the case, and use a waxed paper between each layer.

YANKEE STYLE PEANUT BRITTLE

Packed in cardboard containers or pails.

Place in copper kettle on the open fire 12 lbs. of sugar, 8 lbs. of corn syrup, with 1½ quarts of water. Cook to 250 degrees. Then add 8 lbs. of Spanish No. 1 peanuts and cook the peanuts until they are roasted a light brown color in the syrup. Then set off from the fire on a keg or stand and mix in the batch 2 ounces of soda. Then pour out on a slab that is greased and dusted with flour, then add 1 ounce of salt and fold in the batch on the slab, then fold the batch up three or four times on the slab and then take the rolling pin and roll out on warm slab and then stretch out very thin. Then let lay on cold slab until cold and then pack in cases.

VIRGINIA PEANUT BRITTLE

Packed in half pound and one pound boxes, to be sold to the drug trade.

Place in copper kettle on the open fire 10 lbs. of sugar, 7 lbs. of corn syrup, with 1 quart of water. Cook the batch to 290 degrees, then add 6 lbs. of ground roasted Virginia peanuts and mix thoroughly through the syrup with a little heat on the kettle. Then pour out on a greased slab dusted with flour and add 2 ounces of soda and 1 ounce of salt. Then fold the batch up about 5 times on the slab, so that the soda is mixed through the batch, then roll out thin on a warm table or slab, then stretch out in thin sheets.

When cold pack in one-half pound and 1 lb. boxes, with illustration on box wrappers showing a Virginia peanut plantation.

TEXAS STYLE BRITTLE

Packed in cardboard containers.

Place in copper kettle on the open fire 15 lbs. of sugar, 10 lbs. of corn syrup, with one-half gallon of water. Cook to 250 degrees, then add 10 lbs. of Spanish No. 2 peanuts and cook the peanuts until the peanuts are roasted a light brown color. Then pour out on a slab that is greased and add 3 ounces of soda and 1 ounce of salt, and fold the batch up so that the soda is mixed thoroughly in the batch, then roll out on a warm table or slab in thin sheets, then stretch out in thin sheets. When cold pack in containers, about 15 lbs. to container.

BRITTLES TO BE SOLD TO THE HIGH CLASS RETAIL TRADE

PECAN BRITTLE

Place in copper kettle on the open fire 5 lbs. of sugar, 3

lbs. of corn syrup, with 1 quart of water. Cook to 290 degrees, then add 2½ lbs. of pecan pieces and mix in the batch just long enough to heat the pecans, then pour out on a greased slab, then add 1½ ounces of soda and 1 ounce of salt and fold up in the batch about five times, so that the soda is worked through the batch, then roll out with the rolling pin in thin sheets, then stretch out in thin sheets. When cold place in counter pans.

BLANCHED ALMOND BRITTLE

Place in copper kettle on the open fire 6 lbs. of sugar, 3 lbs. of corn syrup, with 1 quart of water. Cook to 290 degrees, then add 3 lbs. of blanched almonds, and only cook the batch until the almonds are heated thoroughly in the syrup, then pour out on a greased slab. Then add 1½ ounces of soda and 1 ounce of salt and fold up the batch until the soda is thoroughly mixed in the batch, then roll out with rolling pin, then stretch out in thin sheets.

FILBERT BRITTLE

Place in the copper kettle on the open fire 6 lbs. of sugar, 3 lbs. of corn syrup, with 1 quart of water. Cook to 290 degrees, then add 3 lbs. of filberts, and only let the filberts get hot in the syrup, then pour out on a greased slab, then add 1½ ounces of soda and 1 ounce of salt and fold the batch up until all the soda is mixed through, then roll out with rolling pin on a warm table and then stretch out in thin sheets.

BRAZIL BRITTLE

Place in copper kettle on the open fire 5 lbs. of sugar, 3 lbs. of corn syrup, with 1 quart of water. Cook to 290 degrees, then add 3 lbs. of Brazils that are chopped in small pieces, then only heat the Brazils hot in the syrup. Then

pour out on a greased slab, then add 1½ ounces of soda and 1 ounce of salt, and then fold the batch up until the soda is thoroughly mixed in the batch, then roll out thin with rolling pin on a warm slab or table, then stretch out in thin sheets.

BLACK WALNUT BRITTLE

Place in copper kettle on the open fire 5 lbs. of sugar, 3 lbs. lbs. of corn syrup, with 1 quart of water. Cook to 290 degrees. Then add 2½ lbs. of black walnuts that are free from shells, then let the syrup boil up through the walnuts, then pour out on a greased slab, and add 1½ ounces of soda and 1 ounce of salt and fold the batch up until the soda is thoroughly mixed through, then roll down with rolling pin on a warm table or slab and then stretch out in thin sheets.

COCOANUT PEANUT BRITTLE

Place in copper kettle on open fire 5 lbs. of sugar, 3 lbs. of corn syrup, with 1 quart of water. Cook to 250 degrees, then add 1½ lbs. of Spanish No. 1 peanuts and let the peanuts cook in the syrup until the peanuts are roasted a light brown color. Then add 1 lb. of shredded cocoanut and mix in thoroughly. Then pour out on a greased slab, then add 1½ ounces of soda and 1 ounce of salt, then fold the batch up until the soda is thoroughly mixed through, then roll out with a rolling pin in thin sheets, then stretch out in very thin sheets. You can use the flake cocoanut by cutting it up with the adjustable cutter.

COCOANUT FLAKE

Place in copper kettle on the open fire 8 lbs. of sugar, 6 lbs. of corn syrup, with 1 quart of water. Cook to 290 degrees in cool weather or 300 in warm weather. Then have very little heat on the kettle, and add 5 lbs. of sliced chipped

cocoanut and mix up well with the paddle, so that the syrup will cover all the cocoanut and will have a golden color. Then pour out on a greased slab and spread out with the paddle, then stretch out with two table forks in very thin sheets or flakes.

DIXIE FLAKE

Place in copper kettle on the open fire 12 lbs. of sugar, 10 lbs. of corn syrup, with 1½ quarts of water. Cook to 250 degrees, then add 7 lbs. of Virginia peanuts and cook the peanuts in the syrup until the peanuts are roasted a light brown color, then add 7 lbs. of sliced cocoanut and mix the cocoanut through the syrup well, so that all the cocoanut is covered with syrup, then pour out on a greased slab and spread out with the mixing paddle and then stretch out very thin in flakes.

CHOCOLATE PEANUT CRISPS

Place in copper kettle on the open fire 10 lbs. of sugar, 8 lbs. of corn syrup, with 1 quart of water. Cook to 255 degrees, then add 9 lbs. of Spanish peanuts and cook the peanuts until the peanuts are roasted a light brown color, then pour out on a greased slab and add 2½ ounces of soda and 1½ ounces of salt, then fold the batch up thoroughly, then roll out very thin, then cut in small oblong pieces and dip in thin chocolate on the enrober dipping machine.

ICED TRANSPARENT PEANUT SQUARES

Place in copper kettle on the open fire 10 lbs. of sugar, 10 lbs. of corn syrup, with 1 quart of water. Cook to 260 degrees, then add slowly, with very little heat on the kettle, 20 lbs. of blanched Virginia peanuts and mix the peanuts thoroughly through the syrup, then pour out on a greased slab that is dusted light with flour and granulated sugar.

Then spread out with paddle and roll down to one-half inch thick, then cut in three-quarter inch squares. Then, when cold, dip in transparent icing and let stand over night to dry, then pack in pails.

In dipping the peanut squares you must dip the peanut squares on heavy wax paper.

FOR ASSORTED ICED PEANUT SQUARES

Make them in white, red and orange colors, and for the red and orange color, color the syrup just before you add the peanuts. You can make 5 and 10 cent bars with this formula by cutting the bars 1½ inches wide, 3¼ inches long, and roll the batch down to one-quarter inch thick.

SALTING PEANUTS

Peanut Frying Kettle. Thos. Mills Bros., Philadelphia, Pa.

In the manufacture of salted peanuts, almonds or pecans, you must have a frying kettle with an inside wire screen basket container, so that you can drain the peanuts or almonds after they are roasted by just lifting out the wire

basket that contains the peanuts and by just tilting the wire basket your hot grease will drain from the peanuts back into the frying kettle. Then, as soon as the grease has drained from the peanuts, pour them out on a table or a slab to dry. Then they are ready to be salted.

Place 3 gallons of Nucoline oil in the frying kettle, and then set the kettle on the gas furnace and heat the grease to 340 degrees. Now, as soon as the grease is heated to 340 degrees, add 35 lbs. of Spanish No. 1 peanuts in the wire basket and set the basket with the peanuts down into the hot grease and let the peanuts fry until they are roasted a light brown color. Then turn off the gas from the furnace and lift the wire basket that contains the peanuts out and tilt the wire basket in the kettle and let the grease drain from the peanuts. Then, when the peanuts are drained from the grease, pour them out on a table to cool, then, when dry, have some dissolved gum arabic and give them a wetting with this gum solution. Then add just enough salt so that the peanuts are covered, for if you use too much salt you will only have to sieve it from the peanuts when they are to be packed.

As there are a good many ways for salting the peanuts, I will give all the different methods used.

You can add some glycerine on the peanuts as soon as they are cool, then sprinkle the salt on them.

Another way is by letting the peanuts get cold, then take some Stanolax oil and rub over the peanuts so that they are only damp with the oil, then sprinkle the salt on the peanuts. Then they can be packed.

By adding a solution of gum arabic. Take 3 ounces of gum arabic and let it stand over night in 12 ounces of water, then next morning, if it is not thoroughly dissolved, place it in some hot water, so that the water and gum will get warm, then it will dissolve. Then add 2 ounces of corn syrup and

mix thoroughly. Then it is ready to be used for giving the peanuts a wetting while the peanuts are lukewarm, then sprinkle the salt on them. Then they are ready to be packed when cold.

SALTING BLANCHED ALMONDS OR VIRGINIA NO. 1 PEANUTS

Place 3 gallons of water in a copper kettle or steam kettle, and when your water starts to boil add 15 lbs. of Virginia Jumbo peanuts, or 15 lbs. of large almonds. Then let the peanuts or almonds boil in the water for a few minutes, then take one or two of the peanuts or almonds out of the water, and if by pressing on the almonds or peanuts the skins will slip off, then your peanuts or almonds are- soaked enough, so turn off the heat from the kettle and pour the peanuts in a strainer to drain. Then let some cold water run on the hot peanuts or almonds. Then let the girls pull the skins from the peanuts or the almonds. Then they should be left to dry over night. Then they are ready to be roasted and salted.

In roasting the Virginia peanuts you must not place too many of the peanuts in the grease at one time, so that you will not have to stir them with a paddle, or otherwise you will have too many of the peanuts split in halves while roasting them. As for the almonds, they will not split like the peanuts while roasting them, and they do not have to be handled so carefully.

In salting the Virginia Jumbo peanuts you can finish them the same as for salting the Spanish No. 1 peanuts by giving them a wetting of the different solutions, then sprinkle the salt on them. When cold they are ready to be packed in wax paper bags, one-half pound tins, 1 pound tins and also 10 pound tins.

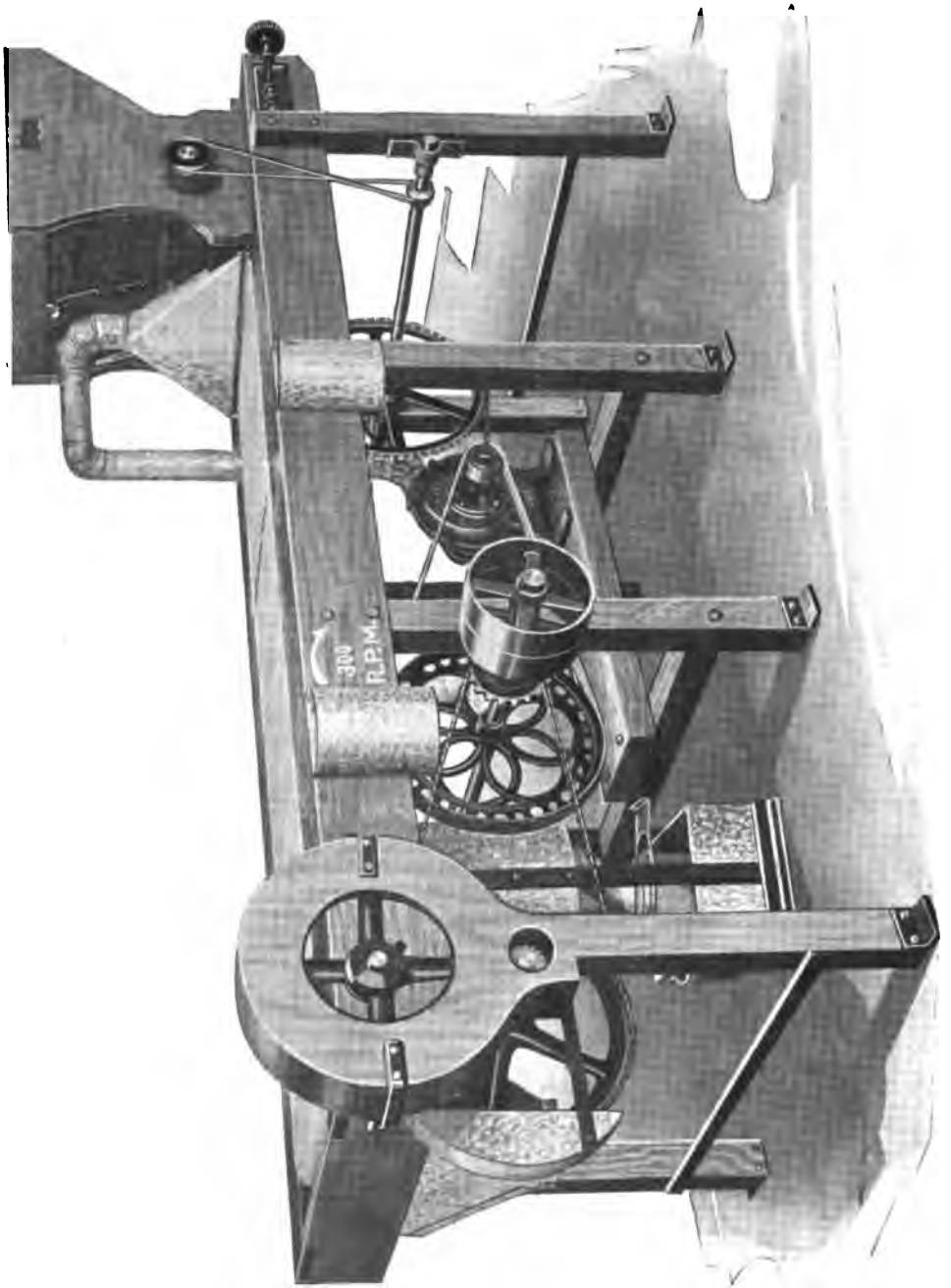
PEANUT BUTTER

Packed in glass jars, pails and barrels.

In the manufacture of peanut butter, to turn out a high grade of peanut butter, you should blend the Spanish peanut with the Virginia peanut, by using 100 lbs, of Spanish No. 1 peanuts roasted and 100 lbs. of No. 1 Virginia peanuts roasted.

For the cheaper grade use No. 1 Virginia peanuts roasted.

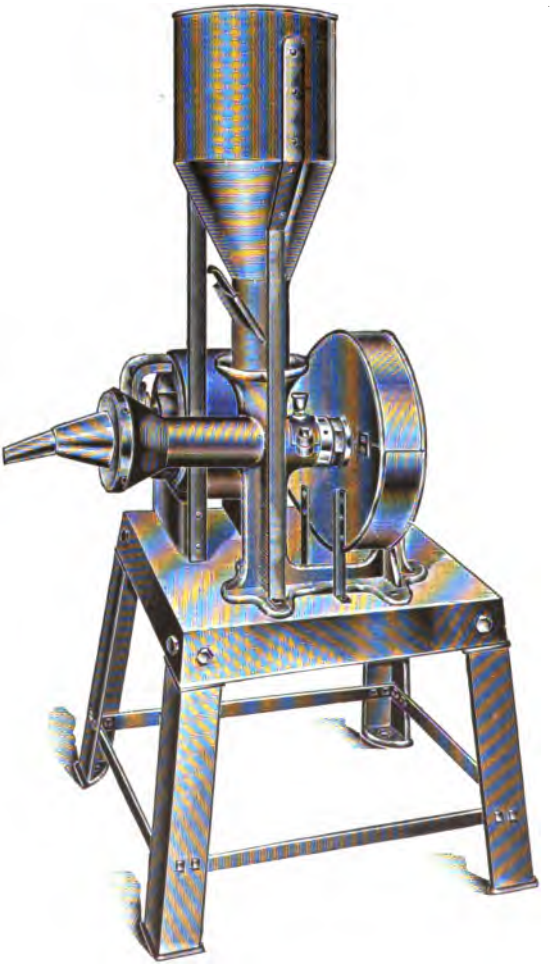
Place 100 lbs. of Spanish No. 1 peanuts in the roaster and give them a light brown roast for a light color peanut butter, and for a dark shade peanut butter roast the peanuts a little darker in shade. Then, after the peanuts are roasted and cooled, they are run through the blanching machine, which cleans the skins from the peanuts. Now, after they have been blanched, they must be assorted over by the peanut picking machine for small stones and sticks which you will find mixed in with the peanuts, unless you buy peanuts that have been picked over by the picking machine.



Peanut Picking Machine. Lambert Machine Co., Marshall, Mich.

Now, after the peanuts are picked over and are free from stones, they are ready to be placed in the receiving hopper, then the peanuts are automatically fed into the grinding mill, while at the same time the salt to flavor the peanut butter is mixed in with the peanuts with an automatic salt feeding device, so that when the peanut putter comes from the peanut grinding mill it is ready to be placed in glass jars, pails or barrels.

The confectioner today can turn out a full line of peanut butter specialties that will always find a ready sale and at the same time sell tons of peanut butter to the grocery trade put up in jars and small one-half pound tin containers.



Peanut Grinding Mill. Lambert Machine Co., Marshall, Mich.

PEANUT BUTTER SPECIALTIES

PEANUT BUTTER PUFFS

Place in a copper kettle, then on the open gas fire, 20 lbs. of sugar, 4 lbs. of corn syrup, with two-thirds gallon of water. Cook to 310 degrees, then add 1 pint of molasses and finish cooking the batch to 310 degrees. Then pour out on a greased slab, and as soon as the batch cools fold up the edges, then when cool enough to handle take one-fifth of the batch for a jacket and bar the jacket good, then place on the spinning board to keep warm. Now then, take the rest of the batch and mix in 1½ ounces of salt and 2 ounce sof soda, then fold up, and when cool enough to handle on the pulling hook pull this part well; but you must not let the batch get too cold on the hook. Then take this pulled batch and bar on the spinning board, then flatten the batch out to make a jacket for the peanut butter center.

The peanut butter must be warm before being placed in the jacket. Take 9 lbs. of peanut butter and place in a bon bon kettle and heat the peanut butter up warm, then add 3 ounces of salt and mix through the peanut butter and one-half ounce of nutmeg.

Now place this warm peanut butter in the center of the pulled batch and fold the batch around the peanut butter when placed in the center of the flat piece. Then close both ends and pull the batch out about 5 feet, then fold up again and pull out the same length, then fold up again and fold the batch up 6 times, so as to honeycomb the batch, as the folding up is what makes the puff eat very crisp. Now then, take the clear part that is kept warm and make a jocket to go around this honeycomb batch, then close both ends and pull out round and cut the strips the length of the buttercup cutter, and cut them with a quick motion, so that the end will open up, for if you press the cutter down slowly they

PEANUT BUTTER PUFFS

will be like a buttercup and the ends will stay closed.

High gloss finish.

Place in copper kettle 25 lbs. of cane sugar, 3 lbs. of crystal fondant with 1 gallon of water. Cook to 330 degrees, then add 1 pint of molasses and finish cooking the batch to 330 degrees. Then pour out on a greased slab, and as soon as the batch is cool enough to handle, fold up the edges.

Now have 10 lbs. of peanut butter heated warm with 3 ounces of salt ready for your center.

Take one-fifth of the batch for a clear jacket, then pull the balance well on the hook, then honeycomb the peanut butter with the cooked batch, then wrap the clear jacket around this honeycomb batch, then cut on buttercup cutter.

You can make peanut butter straws or wafers by cutting the batch on the continuous cutting machine.

CRYSTAL FONDANT MADE FOR HIGH GLOSS FINISH GOODS

Cook in copper kettle 50 lbs. of cane sugar, one-half ounce of citric acid, 1 2-3 gallons of water. Cook to 232 degrees. Pour out in a small keg and let stand over night without any cover. Then it is ready to be used in the manufacture of high gloss specialties.

CHOCOLATE COATED PEANUT BUTTER CHIPS

Place in copper kettle and cook on the open fire 20 lbs. of sugar, 5 lbs. of corn syrup, with two-thirds gallon of water. Cook to 310 degrees, then add 1 pint of molasses and finish cooking the batch to 305 degrees, then pour out on a greased slab, and as soon as the batch cools fold up the edges, then take one-fifth of the batch and leave clear for jacket, then pull the rest of the batch well on the hook, then

twist the air from the batch on the hook. Then have 10 lbs. of peanut butter heating in the bon bon kettle, so that it is warm by the time the batch is cooked. Then place this peanut butter in the center of the pulled batch and honeycomb the peanut butter, then wrap the clear batch around the honeycomb part, then close the ends of the batch and shape the batch flat, then spin out very thin, then cut on the continuous cutter, or by the chip cutter. They must be cut as fast as the strip is spun out. Then dip in chocolate on the enrober machine. This makes a very crispy chocolate peanut chip that will stand up, and can be used for fancy package goods.

For pail goods use 20 lbs. of sugar, 10 lbs. of corn syrup, with two-thirds gallon of water. Cook to 305 degrees, then add 1½ pints of molasses and finish cooking the batch to 305 degrees. Then finish like for package peanut chips, then dip in thin coating on the enrober dipping machine. Then pack in layers in pails.

CHOCOLATE PEANUT BUTTER SNAPS

Place 25 lbs. of sugar in a copper kettle with 3½ lbs. of crystal fondant and 1 gallon of water. Cook to 330 degrees. Then add 1 pint of molasses and 1 lb. of butter and cook the batch to 330 degrees, as the molasses always slackens the batch back. Then pour out on a greased slab and add 2 ounces of salt and fold the batch up as soon as cool enough to handle, then have 12 lbs. of peanut butter heated warm, with 2 ounces of salt mixed in the peanut butter, then, when the batch is cool enough, pull the batch well on the hook, then twist out the air from the batch on the hook, then bar the batch thoroughly, then place the 12 lbs. of peanut butter in the center and wrap around the peanut center, then close both ends and keep the batch in a round shape, and then feed the continuous cutting machine; or, if

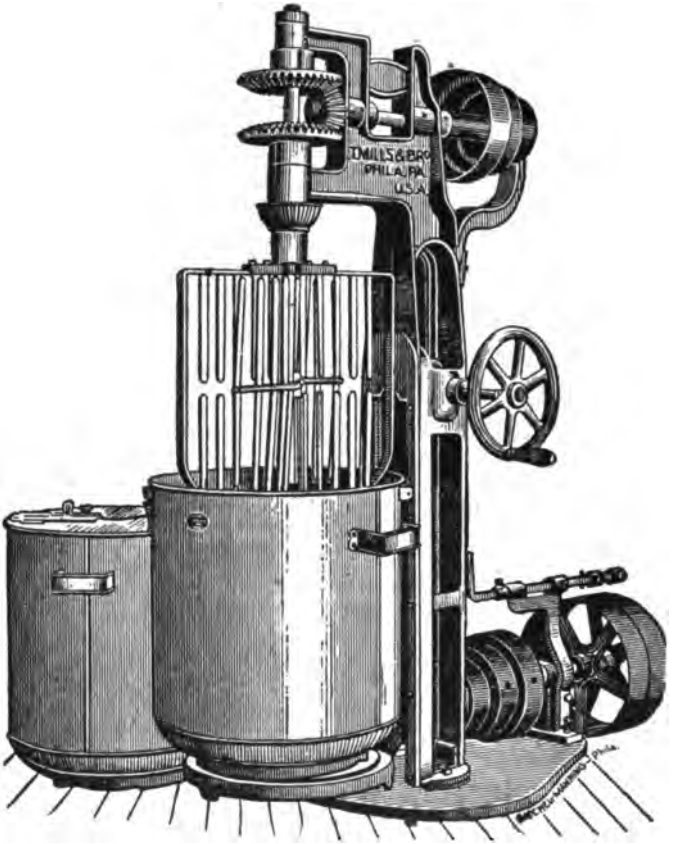
you do not have the continuous cutter, cut them on the waffle cutter. Then, when cold, dip them in thin chocolate on the enrober dipping machine. They can be used for package goods or sold in pails.

CHOCOLATE PEANUT STRAWS

Place in copper kettle, then cook on the open fire 20 lbs. of sugar, 7 lbs. of corn syrup, with two-thirds gallon of water. Cook to 310 degrees, then add 1 pint of molasses and 1 lb. of butter. Then finish cooking the batch to 305 degrees for cold weather or 310 degrees for warm weather. Pour out on a greased slab, and when cool enough to handle, pull well on the hook. Then twist the air from the batch while on the hook, then use 8 lbs. of peanut butter with 3 ounces of salt for the center and heat the peanut butter warm before placing it in the center of the batch. Then spin out in very small sticks the size of a lead pencil.

Then cut with adjustable cutter in sticks about 1½ inches long. For wholesale work use the continuous cutter. Then dip in chocolate on the enrober dipping machine. Then use for package goods or 5 lb. box goods.

ICING WORK SPECIALTIES



Icing Beater Used for Beating All Kinds of Icing.

Formulas for making the different kinds of icing used for iced dipped specialties:

Soak over night 4 ounces of egg albumen in 1 pint of water. Then dissolve 8 ounces of fast setting gelatine in 1 gallon of water that is heated only hot enough so that the gelatine will dissolve. Then place the dissolved

gelatine in the beater and add 35 lbs. of 4 X powdered sugar and start the beater going on fast speed and beat the batch up thoroughly. Then add the dissolved egg albumen and beat the batch of icing up very light. Then it is ready to be used for dipping with.

Every wholesale manufacturer who is turning out a line of icing work specialties should have a powder sugar mill for grinding his own powder sugar for using in the manufacture of the different icings that are used for dipping; also for the pan department and chewing gum department, as all the sugar that is used in the manufacture of stick and ball chewing gum is made with powder sugar, and no wholesale confectioner or chewing gum manufacturer can afford to be without a sugar grinding mill in his plant, as the sugar grinding mill will pay for itself in a very short time.

Sugar Grinding Mill. National Equipment Co., Springfield, Mass.

ICING MADE WITH GRANULATED SUGAR

Soak over night 3 ounces of egg albumen in 1 pint of water. Then dissolve 5 ounces of fast setting gelatine in 1 gallon of water by placing the gelatine and water in a copper kettle. Then heat the water warm in the kettle so that the gelatine is thoroughly dissolved, then add 25

lbs. of granulated sugar and just heat the dissolved gelatine water so that the granulated sugar will dissolve so that you cannot see any grain of sugar in your batch. Now place 1 lb. of special fondant in your icing beater with your dissolved 3 ounces of egg albumen and beat the egg albumen and special fondant up very light, then add the batch of dissolved gelatine and granulated sugar and beat up very light.

ICING MADE WITH GUM ARABIC

Place 25 lbs. of 4 X powder sugar in the beater and then dissolve 4 ounces of fast setting gelatine and 6 ounces of powder gum arabic in 1 gallon of hot water. Then start the beater going on slow speed and pour in the dissolved gelatine and gum arabic and then start the machine on fast speed and beat the batch up very light.

ICING MADE WITH EGG ALBUMEN

Soak over night 7 ounces of egg albumen in 1 pint of water. Then place in a copper kettle and cook on the open fire or by steam kettle 25 lbs. of granulated sugar with 1 lb. of corn syrup and cook to 222 degrees.

Now place 2 lbs. of special fondant in the icing beater with the dissolved egg albumen and beat the egg albumen and fondant up very stiff, then add the cooked syrup and beat the batch up very light. Then it is ready to dip with.

Icing Dipping Department.

TRANSPARENT ICING OR WATER ICING FOR PEANUT WORK OR COCOANUT WORK

Dissolve 2 ounces of gelatine in 1 quart of hot water, then add 1 lb. of cream fondant and thoroughly dissolve; then add 10 lbs. of 4 X powder sugar that is sifted through a very fine sieve, and mix thoroughly. Then keep the icing lukewarm by setting kettle of icing in warm water, or you can mix the icing in the bonbon kettles and only keep the icing lukewarm.

In making transparent icing do not beat the icing in the beater, as this icing must only be mixed thoroughly by hand or paddle, then it is ready to dip with.

In dipping transparent icing work, dip the goods in the icing, then take out and let drain on a wire screen. Then

place on trays with wax paper, then let stand over night. Then they are ready to pack.

DECORATING ICING FOR CHOCOLATE EASTER EGGS

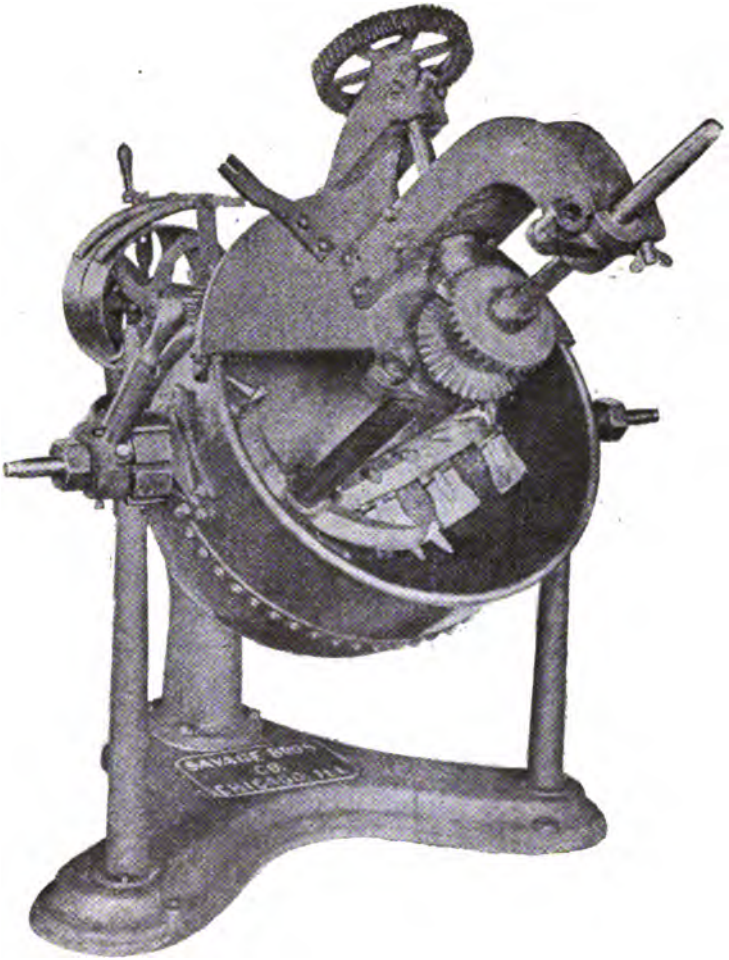
No. 1. Soak 4 ounces of egg albumen in 1½ pints of water over night in a glass jar. Then place one-half lb. of special fondant, with the dissolved egg albumen in the icing beater. Then add 4 lbs. of powder 4 X sugar and beat the batch up very stiff and light, then add 4 more pounds of powder sugar and one-half teaspoon of acetic acid No. 8, and beat up very light. Then it is ready to be used in decorating the chocolate eggs. Then cover the icing in the bowl of the machine with a cloth so that the icing does not dry out while using it, for when you leave the icing exposed to the air the icing will form a crust, which will stop up the decorating tubes.

In coloring the icing, if the icing does not stand up, add a little sifted powder sugar and mix up in your mixing bowl, and if the icing is too stiff add a little water.

No. 2. Soak 3 ounces of egg albumen in 1 pint of water over night. Then place the dissolved egg albumen in the beater with one-half lb. of special nougat fondant, then add enough powder sugar to make a stiff paste and beat up very light. Then add 5 drops of acetic acid, then it is ready to be used for decorating the chocolate eggs.

ICED COCOANUT WORK

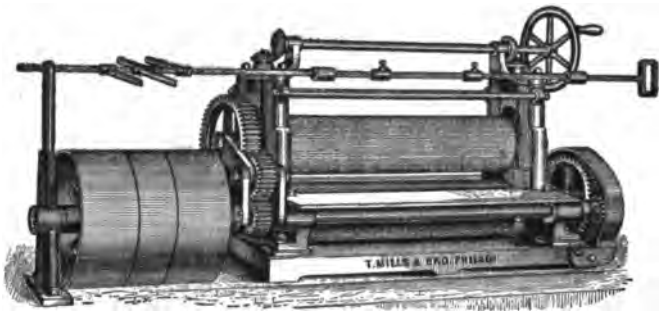
ASSORTED ICED COCOANUT SQUARES



Cocoanut Stirring Kettle.

Place in steam stirring kettle 25 lbs. of corn syrup, 12

lbs. of sugar, with 1 quart of water and 1 lb. of flour and 1 lb. of Nuco butter. Cook to 243 degrees, then add 18 lbs. of fine cocoanut and 2 ounces of vanilla flavor for the white. Then take out in a kettle that is greased and dusted heavy with flour, then pour out on a greased slab that is dusted with flour and granulated sugar. When partly cold take and size through the rolls one-half inch thick, then cut on caramel machine in squares one-half inch square, then dip in icing and let stand until next day, then pack.



Sizing Machine for Rolling Down Cocoanut Work

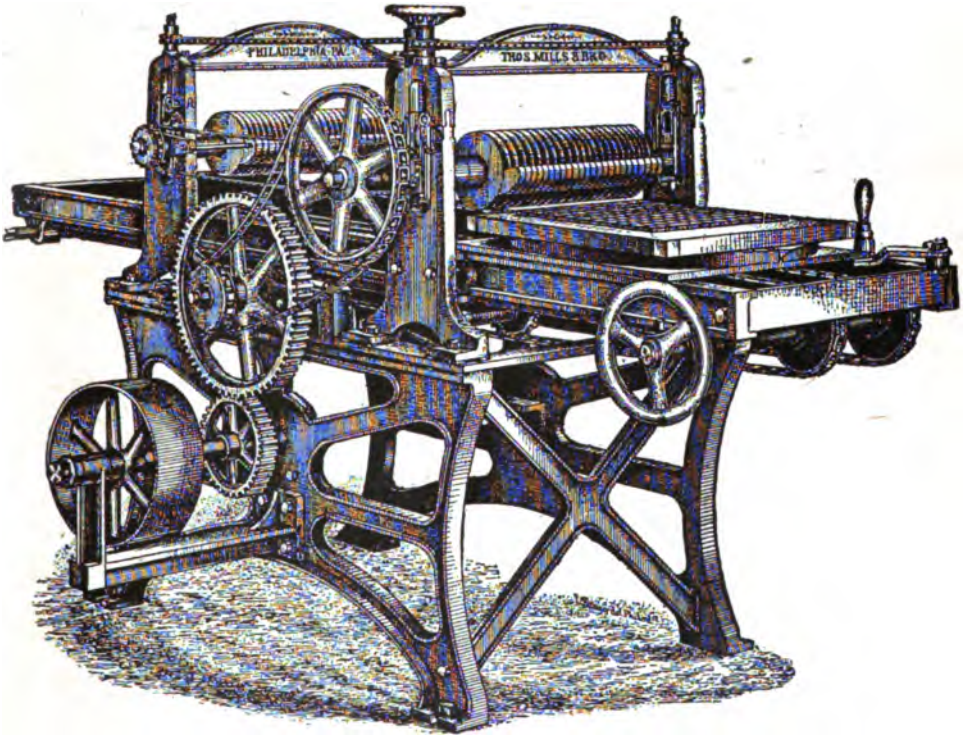
Make the cocoanut squares in assorted colors and flavors, white color vanilla flavor, yellow color lemon flavor, pink color wintergreen flavor, maple color flavor with maple flavor and color with burnt sugar color, orange color flavor with oil of orange.

In dipping these assorted colors do not color the icing. Leave the icing transparent and the colors will show through.

MOLASSES COCOANUT FIG SQUARES

Place in steam stirring kettle 25 lbs. of corn syrup, 14 lbs. of sugar, 1 gallon of molasses, 1 lb. of Nuco butter, 1½ lbs. of flour. Cook to 242 degrees, then add 5 lbs. of ground

figs and let the figs cook through the syrup, then add 20 lbs. of fine cocoanut and mix through the syrup. Then pour out on a greased slab that is dusted with flour and granulated sugar; then, when cool, size down one-quarter inch thick and cut on caramel cutter in 1 inch squares. Then dip in transparent icing.



Caramel Cutter for Cutting Cocoanut Squares.
Thos. Mills Bros., Philadelphia, Pa.

COCOANUT JELLY STICKS

Place in steam stirring kettle 20 lbs. of corn syrup, 10 lbs. of sugar, 1 quart of water, 1 lb. of flour and 1 lb. of Nuco butter. Cook to 240 degrees. Then add 18 lbs. of fine cocoanut and mix thoroughly. Then add 10 lbs. of jelly spice drops and mix in the batch.

Then pour out on a greased slab that is dusted with flour and granulated sugar. Then size down to 1¼ inches thick; then, when cool enough, cut in three-eighths inch strips, and then cut on caramel cutter. Then dip in icing.

ASSORTED COCOANUT ROLLS

Place in steam stirring kettle 25 lbs. of corn syrup, 15 lbs. of sugar, 1 lb. of flour, 1 lb. of Nuco butter and 1 quart of water. Cook to 245 degrees. Then add 17 lbs. of fine cocoanut and 2 ounces of vanilla flavor and mix thoroughly. Then pour out on a greased slab that is dusted with flour. Then, when cold enough to handle, size down one-half inch thick, then cut in strips on the caramel cutter, then run the strips through the rolls. Then, when cold, break up and dip in transparent icing. Make them in assorted colors and flavors, which will make a very good pail specialty for the jobbing trade.

CARAMEL COCOANUT SQUARES

Place in steam stirring kettle 10 lbs. of corn syrup, 10 lbs. of sugar, 1½ lbs. of Nuco butter, 14 lbs. of condensed milk. Cook to a stiff ball when tried in cold water. Then add 6 lbs. of fondant cream and mix thoroughly for 5 minutes, then add 5 lbs. of corn syrup and 7 lbs of shredded cocoanut and 2 ounces of vanilla flavor and 1 ounce of salt. Then pour out on trays lined with manilla paper with rods on the trays one-half inch high. Then let stand until next day, then soak the paper from the caramel, then cut in strips on

the nougat cutter, then on the caramel machine. Then dip in transparent icing.

COCOANUT SPECIALTIES

Crystallized cocoanut squares for pails of box goods.

Place in steam stirring kettle 25 lbs. of corn syrup, 20 lbs. of sugar, one-half gallon of water, 1 lb. of flour and 1 lb. of Nuco butter. Cook to 245 degrees. Then add 20 lbs. of fine cocoanut, and 1 ounce of vanilla flavor. Pour out on a cold slab that is dusted with flour and granulated sugar. When cool size and cut in squares, and as soon as you cut them in squares on the cutting machine throw them in granulated sugar. Then sieve the sugar from them, Then let dry over night, then put them in crystal at 33½ degrees.

Make these in assorted colors and flavors, white, yellow, pink, maple, orange and chocolate colors.

SANDED COCOANUT SQUARES

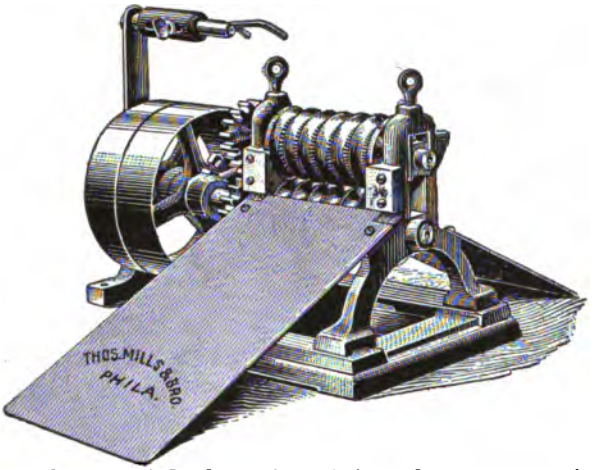
Place in steam stirring kettle 30 lbs. of corn syrup, 12 lbs. of granulated sugar, 1 quart of water, 1 lb. of flour and 1 lb. of Nuco butter. Cook to 242 degrees. Then add 19 lbs. of fine cocoanut and 1 ounce of vanilla flavor for the white. Then pour out on a cold slab that is dusted with flour and granulated sugar. Then, when cool, size and cut in squares. Then throw in granulated sugar, then sieve the sugar from them. Then, when dry next day, pack in pails in layers.

Make them assorted colors and flavors.

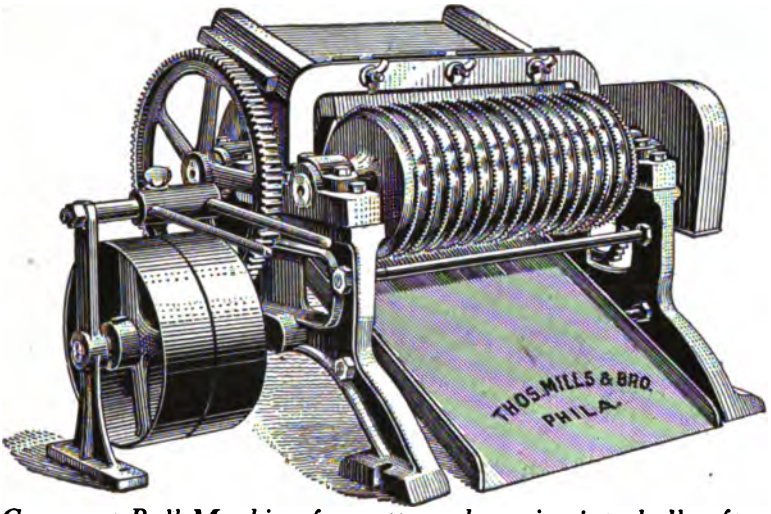
COCOANUT BON BON CENTERS

Place 25 lbs. of corn syrup in a steam kettle and cook the corn syrup to a boil only. Then add 18 lbs. of fine cocoanut and 2 lbs. of flour and 2 ounces of vanilla flavor. Pour out on a cold slab that is dusted with flour and greased.

Then, when cold enough to handle, size down to one-half inch thick. Then run through the ball cocoanut cutter, and then through the ball cutting machine.



Cocoanut Cutting Machine for sizing the cocoanut in strips Before they are cut into round balls.



Cocoanut Ball Machine for cutting the strips into balls after they have been run through the ball sizing machine.

Then dip in bon bon fondant cream and then, next day, crystallize.

FONDANT CREAM FOR DIPPING COCOANUT BON BONS

Place in a steam kettle 100 lbs. of cane sugar, 25 lbs. of corn syrup, with 4 gallons of water. Cook to 242 degrees. Pour out on ball cream beater; then, when partly cool, cream to a fondant. Then it is ready to dip with in bon bon kettles. After the bon bons are dipped let them stand over night, then place them in crystal at 33½ degrees. When drained and dry pack in circle trays in assorted colors and flavors.

COCOANUT FRUIT SQUARES, FOR PAILS

Place in steam stirring kettle 15 lbs. of corn syrup, 10 lbs. of sugar, 1 lb. of Nuco butter, 1 quart of water. Cook

to 245 degrees. Then add 8 lbs. of thread cocoanut, 2 lbs. of flour and 2 lbs of fine cocoanut, then add 5 lbs. of glazed cherries and 5 lbs. of figs ground coarse. Pour out on a slab that is greased and dusted with flour and granulated sugar. Then spread out with a paddle and leave the top rough like. Do not roll the batch, only spread out with a paddle so that the batch will be about 1 inch thick; then, when cold, cut in squares, then let stand on trays over night to dry, then pack in pails in layers with circle trays.

COCOANUT FIG CARAMEL, DIPPED IN CHOCOLATE

Place in steam stirring kettle 18 lbs. of corn syrup, 10 lbs. of sugar, one-half gallon of water, 1 lb. of Nuco butter, 1 quart of molasses. Cook to 240 degrees. Then add 10 lbs. of fine cocoanut, 2 lbs. of flour and mix well, then add 10 lbs. of ground figs that have been steamed. Then pour out on a slab that has been greased and dusted with flour. Then, when cold, cut in squares three-quarters inch square and one-half inch thick. Then dip on enrober machine in thin chocolate.

CHEWING GUM WORK

Chicle, which is used in the manufacture of chewing gum, is the sap that comes from the chico zapote tree, which is found in the tropical lowlands of Mexico.

Showing the natives' camp in the tropical lowlands forest of Mexico.

The chico zapote tree, which is found in the lowlands of Mexico, will produce from 4 to 6 pounds of gum chicle to a tree every year. The zapote trees, which the chicle comes from, are tapped during the fall months, at the close of the rainy season, which they have in October. In gathering the sap from the trees the natives must climb the trees to a height of 35 to 50 feet, then they cut about three diagonal cuts with what the natives call the machete, on either side of the zapote trees, with the cuts joining at the lower ends. Then the sap is collected in a vessel tied below the cuts on the trees. Now then the sap juice is collected in gourds, then it is poured in iron kettles to be boiled down so that 50 lbs. of sap juice when boiled down will only be 25 lbs. of chicle when cooled.

Showing how the native boils the sap juice down so that the chicle can be formed in blocks when cooled, when it is sent to the United States to be used in the manufacture of chicle chewing gum.

In the manufacture of chewing gum stick or ball gum the manufacturer must have the very latest facilities, as a steam boiler, gum cooker, sizing machines, scoring machines, tray racks and the wrapping machines, for turning out the package stick chewing gum. For the manufacture of ball chewing gum you must have gum cooker, steam boiler, chicle chopper, ball sizer and ball cutter, and revolving pans for running up the ball gum centers, and a fan blower for drying up the charges that are put on in the revolving pans.

MANUFACTURE OF STICK AND BALL CHEWING GUM

Chicle Chopping Machine for chopping the Chicle.
Clough & Witt Machine Co., Cleveland, O.

This machine is one of the most useful machines about a gum factory and is used for chopping the chicle into suitable size pieces, which greatly facilitates in cleaning same, also aiding in the mixing process, as the chicle, after chopping, is more uniform in size, and in small particles, and readily and more easily assimilates with other ingredients, making the mix more thorough and in less time.

After your chicle has been chopped fine and thoroughly cleaned from foreign matter, as bark and sticks, then it is ready to be used in the manufacture of chewing gum.

MANUFACTURE OF STICK AND BALL CHEWING GUM

Steam Jacket Gum Cooking and Mixing Kettle. Clough & Witt Co., Cleveland, Ohio.

This steam mixing kettle is used for cooking the corn syrup and dissolving the gum chicle.

This steam kettle is tested to stand 80 lbs. of steam pressure, and should only be used at a working pressure of 25 lbs. of steam, which can be obtained by adjustment of the regulator which is on the cooking kettle. In setting up this steam gum cooker the pulley should run 150 revolutions per minute. This size cooker is capable of handling a 175 lbs. batch of gum every hour at a working pressure of 25 lbs. of steam.

PEPPERMINT STICK CHEWING GUM

Sold 5 sticks wrapped in a package, 24 packages to a carton.

Place 25 lbs. of corn syrup testing 43 degrees, in steam cooking gum kettle, then turn on the steam with the regulator set at 25 lbs. steam pressure. Then, when your corn syrup is cooked to very light crack, add 25 lbs. of chicle that is chopped fine.

You must never cook the gum with a high pressure of steam; 20 to 25 lbs. of steam pressure is all you should carry on the gum kettle while cooking the corn syrup or dissolving the chicle.

For cold weather months use the corn syrup testing 43 degrees. For the hot weather months use the corn syrup testing 45 degrees. In testing a batch of gum, there are two ways to test the batch of gum so that you will know when the gum is cooked high enough or too low before adding the powder 4 X sugar.

The old method of testing the corn syrup and dissolved chicle is when the small bubbles come to the top of the batch and break, then you know that your batch is done. The most reliable way I have found in testing the gum is by the cold water test. When your corn syrup has cooked to a light crack, then add the chicle and let the batch cook with the stirrer going all the time from the time you place the corn syrup in the kettle up to the time the batch is cooked and finished.

In knowing when the batch is cooked by the cold water test dip your hand in the cold water first, then dip your hand down into the batch and pick up some of the batch on two of your fingers, then dip the batch of gum and corn syrup in the water, and if it forms a stiff ball as soon as it cools off in the water, then you know your batch is cooked high enough. Then add 80 lbs. of 4 X powder sugar and mix thor-

oughly, and 4 lbs. of flour, then add 7 ounces of oil of peppermint flavor and mix thoroughly. Then turn off the steam as soon as you add the powder sugar, before adding the oil of mint. Then you must have a slab to place the batch out on when you take the batch from the gum kettle, which must be done with your hands with a pair of canvas gloves on, and dust the gloves heavily with starch while taking the batch from the mixer and placing on the slab, then it is kneaded up and rolled flat with a rolling pin, then it is cut in squares about 1 foot square, with a circle knife. Then it is ready to run through the roughing rolls.

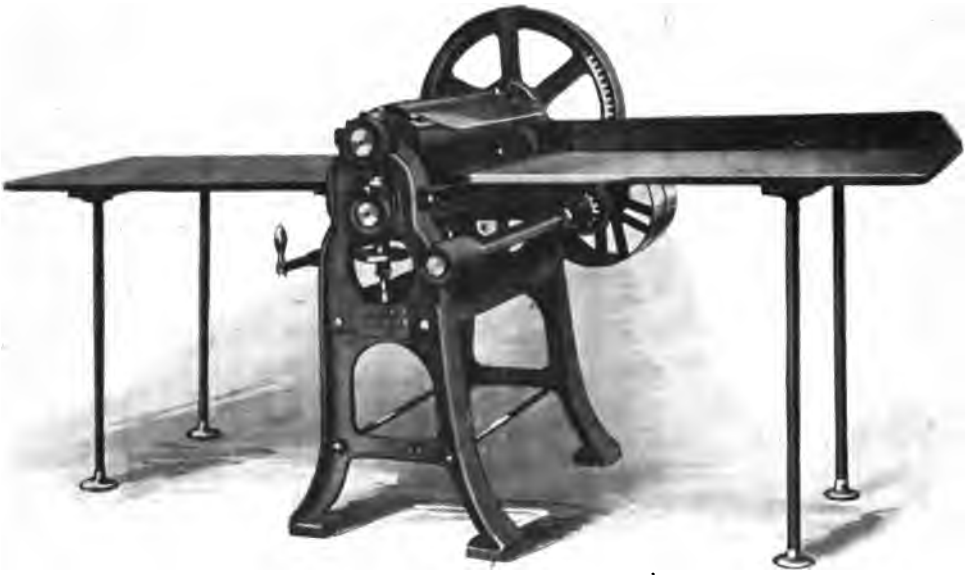
Roughing Rolls. Clough & Witt Co., Cleveland, Ohio.

These roughing rolls are fastened to a table and the cut above shows the rolls are used right handed, goods passing in rolling the gum down from left to right, and the operator works the adjusting wheel with his right hand, which leaves the left hand free for pulling the gum back again to be run through the rolls again.

These roughing rolls are used to run the gum through as soon as you are able to handle the gum from the receiving

slab when it comes from the cooker.

Now after you have sized the gum down to one-eighth inch thick, the gum must go through the finishing rolls before the gum is ready to be cut and scored to be broken up into sticks.



Finish Rolling Machine. Clough & Witt Co., Cleveland, O.

This machine is used for finish rolling the gum cold after leaving the roughing rolls.

By rolling the gum cooler more sticks of gum can be cut out of the same sheet of gum, and of a more uniform thickness than it is possible to be obtained with the roughing rolls, which must be constantly manipulated by the operator.

The finishing rolls are set to the thickness of the finished gum that is wanted for the wrapping machine.

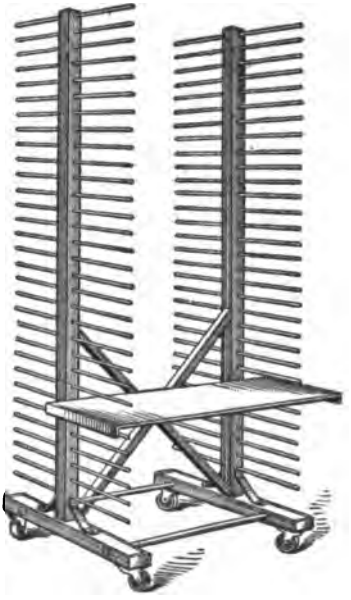
The gum being of uniform thickness when rolled in the finishing roll, will be a great advantage when wrapped by the machine. Then, when the gum has gone through the finishing rolls it is ready to be cut and scored by the cutting and scoring machine.

Finishing Rolling Machine Connected to Cutting and Scoring Machine with Conveyor, Motor Driven. Clough & Witt Co., Cleveland, Ohio.

This arrangement of machines saves the handling of the gum, as it goes directly from the finishing rolls to the cutting and scoring machine as soon as finished, rolled down without additional handling, as required when machines are run separately.

By having the machine built in this way the finishing machine can be adjusted and used for thicker stick gum when needed, not allowing same to pass through the cutting and scoring machine.

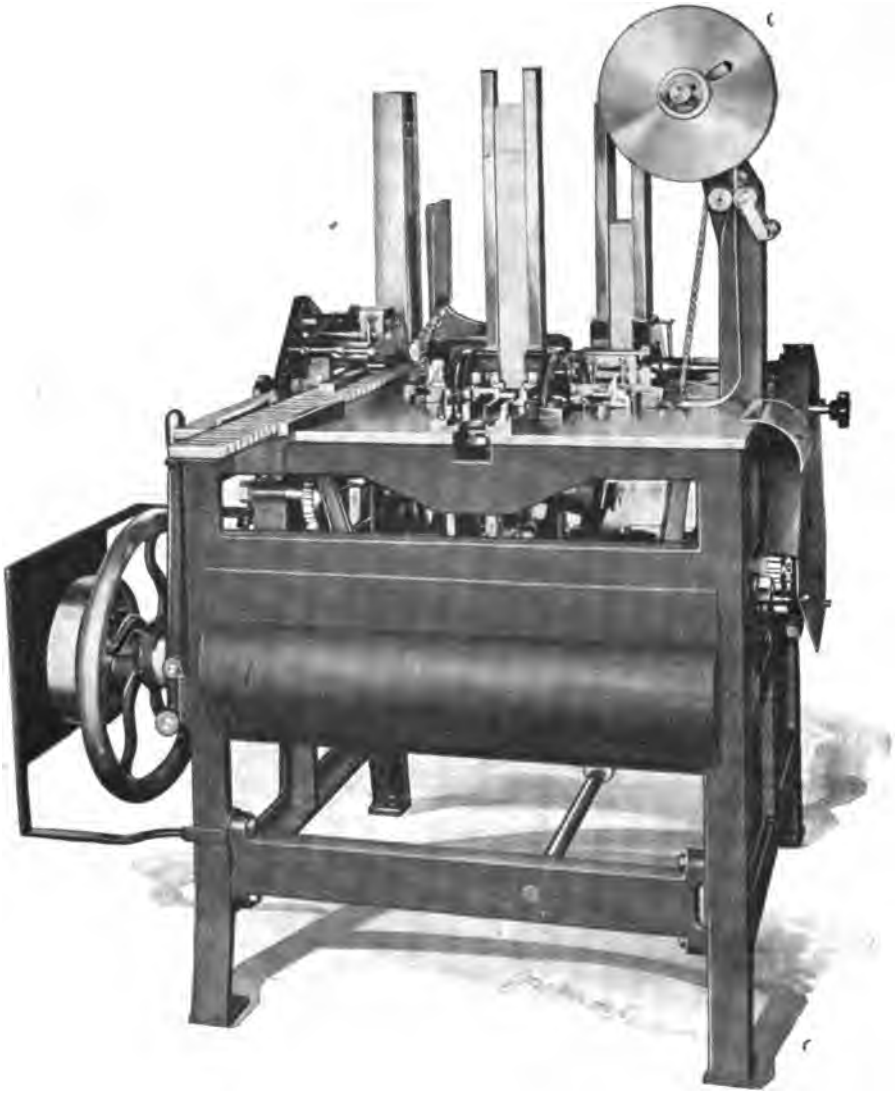
After the gum is run through the cutting and scoring machine the sheets of gum are placed on trays which are dusted with starch, so that you can place 3 to 4 sheets to a tray, then place the tray in the board rack and let stnd over night; then, next morning, it is ready to be broken into sticks.



Portable Board Rack. Thomas Mills Bros., Inc., Philadelphia, Pa.

This board rack is used for stacking the gum on trays so that as soon as the sheets of gum are cut and scored they can be placed on trays, then the trays placed in the rack to be moved to any part of the room, where the girls break the gum into sticks, then place in trays to be ready for the wrapping machine.

Now when your gum is cold and broken into sticks and placed in trays on ends, it is ready to be wrapped by the wrapping machine.



Chewing Gum Wrapping Machine, Model BB. Package Machinery Co., Springfield, Mass.

This chewing gum wrapping machine is used by the largest gum manufacturers of the country for wrapping the standard size 5-cent package of chewing gum. The machine wraps each stick in foil or wax paper, then applies band to individual stick of gum and seals it. Then the machine assembles the five wrapped sticks, reversing the fifth stick so that front of the outside stick shows, whichever side of the package is opened; then bands the five sticks together and seals with paste.

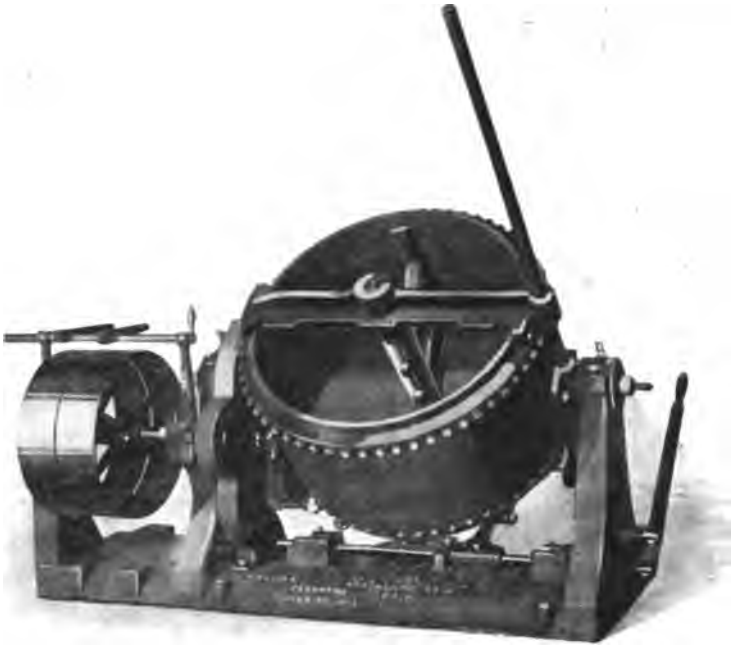
The individual sticks, the inside bands and the outside bands are fed from magazines, and the foil or waxed paper for the first wrapping is fed from the roll and cut to the proper length.

In operating the machine it takes one girl to keep it supplied with the sticks of gum, foil or wax paper, labels and bands and packs the completed package into boxes.

This machine has made possible the present attractive, sanitary and protective style of chewing gum wrapping that always keeps the chewing gum so fresh, soft and flexible.

For wrapping the stick gum on the Model BB wrapping machine the package must be within the following limits: 2½ to 3⅛ long, 11-16 to 13-16 wide, .060 to .100 thick. Sped of the machine 150 revolutions per minute.

In the manufacture of stick and ball chewing gum on a large scale, where you expect to turn out from 3 to 5 thousand pounds of gum per day, you must have the 300-lb. gum cooker and tilting mixing kettle.



Tilting Gum Cooking and Mixing Kettle. Clough & Witt Co., Cleveland, Ohio.

This gum cooker and mixing kettle are used by the large gum manufacturers whose output keeps from 3 to 6 wrapping machines going; also from 3 to 6 revolving pans going for running up ball gum. This mixer and cooker is built on the same principle as the 175-lb. cooker and mixer, but the 300-lb. cooker is arranged so as to tilt the kettle to facilitate the removal of the gum after it is cooked, reducing the hard work of emptying the mixer to a minimum, thereby saving a great deal of time, as the scrapers in the mixer revolve when the kettle is tilted, which makes the cleaning of

the gum kettle a very simple operation.

When cooking a batch of gum it should be used at a working pressure of 25 lbs. of steam. The pulleys on the 300-lb. cooker and mixer should run at 300 revolutions per minute. Steam boiler to be used for cooker can also be used for one steam jacket kettle, and also heating the revolving pans for running up the ball gum. Size of boiler 24x7x2½, type S. V. T., with gas burners and fan blast burner. You will find by using the gas for fuel the cooker for the gum kettles can take care of the steam boiler as well as cook the gum.

The majority of the gum manufacturers today are using the fan blast gas burners for their boilers, as they do away with the dirty coal dust in the factory, where you have the one floor for manufacturing. The greatest advantage of gas for fuel is that it is clean and sanitary when you are located on the second, third or fourth floor of a building.

SPEARMINT STICK CHEWING GUM

Wrapped 5 sticks to package and packed 20 packages to carton.

Place 30 lbs. of corn syrup in your gum cooking kettle and turn on the steam with the regulator set on the kettle at 25 lbs. steam pressure and cook the corn syrup to a very light crack when tried in water for the hot weather months. For the cold weather months cook the corn syrup to a stiff ball when tried in cold water. Then add 25 lbs. of chicle and cook the chicle in the corn syrup until the batch will show small bubbles formed on the top of the batch and then break; or, when tried in cold water, your batch should be a stiff ball, or 245 degrees for warm weather. During the hot weather months cook to 247 degrees by cold water test. Then add 80 lbs of 4 X powder sugar and mix thoroughly, then add 4 lbs. of flour and 6 ounces of oil of spearmint flavor. Then take your batch out from the kettle and place

on the slab, which must be dusted with starch; then knead up well and then run through the roughing rolls, then through the finishing rolls, then cut and score the sheets of gum into sticks. Then place on trays dusted with starch and place the trays in the racks and let stand till cool, then break into sticks.

SPEARMINT STICK MADE WITH CHICLE AND PALOJA GUM

Paloja gum is a substitute for chicle and can be used in the manufacture of all the different kinds of stick and ball gum work. Paloja gum is a natural gum chemically and physically identical with chicle, and in the manufacture of chewing gum it works exactly the same as chicle, melts at the same temperature, chews the same way and will cook with corn syrup and caramel paste and mix with sugar the same as chicle does. At the present high price of chicle a good many of the manufacturers of chewing gum are using this paloja gum in the manufacture of stick and ball gum.

By the use of this paloja gum with chicle, mixed together, or it can be used by itself, you can produce a very good piece of gum, either in the stick or ball gum.

PALOJA GUM USED IN THE MANUFACTURE OF CHEWING GUM

L. A. Dreyfus Co., Rosebank, Staten Island, New York.

SPEARMINT STICK GUM MADE WITH CHICLE AND PALOJA GUM

Place 20 lbs. of corn syrup in your gum cooker and turn on the steam, and also stirrer, on the gum cooking kettle and cook the batch with 25 lbs. of steam pressure; then cook the corn syruup to a stiff ball, then add 10 lbs. of cara-

mel paste and finish cooking the batch to a light crack when tried in cold water. Then add 10 lbs. of chicle that is chopped fine and 15 lbs. of paloja gum that is chopped fine and cook the batch to a stiff ball when tried in cold water, or about 245 degrees.

You can always tell when the batch is cooked high enough. The batch will cling to the sides of the kettle and small bubbles will come to the surface of the batch and then break. Then turn off the steam, and if you have any spearmint stick scrap from the cutting add about 10 lbs. of scrap and let mix until thoroughly dissolved. Then add 80 lbs. of 4 X powder sugar with 2 lbs. of flour and add 7 ounces of oil of spearmint flavor. Then tilt the kettle and take out with canvas gloves dusted with starch and place on the receiving slab, then knead up and roll down in square pieces about 2 inches thick, then run the squares through the roughing rolls, then through the finishing rolls and then through the cutting machine and scoring machine. Then place on trays 3 to 4 sheets to the tray, then place the trays in your board rack to cool until next morning. Then have the girls break them in sticks and place the sticks on end in the trays. Then they are ready to be wrapped by the wrapping machines.

Pointers to keep in mind when rolling down the sheets of gum through the roughing rolls and also the finishing rolls.

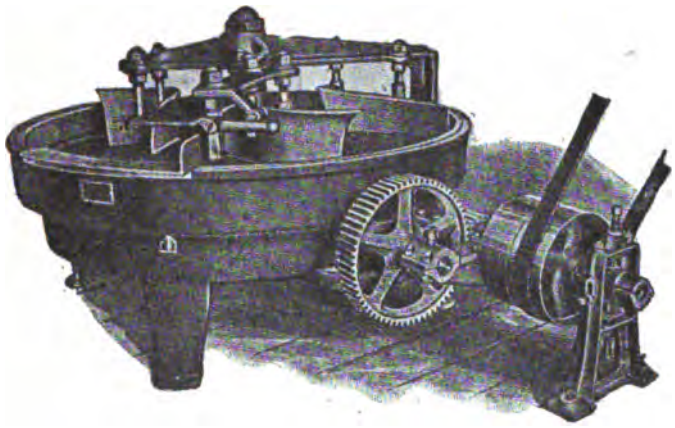
Dust the sheets with starch every time the sheet of gum passes through the rolls. That is done to keep the gum from sticking to the rolls; and also dust the sheets of gum lightly with starch and a little powder sugar when placed on the trays after they are scored and cut into sticks, or otherwise the sheets of gum will stick together on the trays.

CARAMEL PASTE FOR GUM WORK

Cook in a steam jacket caramel kettle, or the gum kettle.

Place in cooking kettle 70 lbs. of corn syrup, 5 lbs. of flour and mix thoroughly. Then turn on the steam and start the mixer. Then add 20 lbs. of brown sugar, No. 10 grade, then add 22 lbs. of condensed milk with 2 lbs. of Nuco butter and cook the batch to a stiff ball, or 245 degrees. Then pour out on a ball beater and turn on the water to cool the batch, then let the batch mix on the beater until thoroughly cool. Then it is ready to use, or can be placed in barrels.

Some of the large caramel houses use starch for making their caramel paste, but I have found by experience that flour will give the caramel paste a better body, and when used will not have the starchy taste in the finished goods.



The Dayton Ball Beater for Mixing and Cooling the Paste. The Ball Cream Beater Co., Dayton, Ohio.

SPEARMINT OR PEPPERMINT STICK GUM

Place in the gum cooking kettle 20 lbs. of corn syrup and 10 lbs. of caramel paste and cook to a light crack when tried in cold water, then add 25 lbs. of paloja gum and cook

until thououghly dissolved, then cook the batch to a stiff ball, or 245 degrees, or until small bubbles come to the surface eand break. Then your batch is cooked high enough. In case your batch is cooked too high when the paloja gum is all dissolved, you can reduce the cook by adding a little corn syrup, and then, when adding the powder sugar, add enough more of the powder sugar to make up for the amount of corn syrup that you used in reducing the batch; or, if your batch feels too low, add some stick scrap before adding the powder sugar. Now, when your batch is cooked add 80 lbs. of 4 X powder sugar and 2 lbs. of flour, and for spearmint flavor add 6 ounces of oil of spearmint and 1 ounce of oil of peppermint. For peppermint stick gum add 7 ounces of oil of peppermint. Then finish the batch the same as for the spearmint gum in handling, rolling and cutting.

CARMINT STICK GUM

Place 30 lbs. of corn syrup in the gum cooker and 10 lbs. of condensed milk and cook to a stiff ball when tried in cold water. Then add 25 lbs. of paloja gum and cook to a stiff ball, or 245 degrees when tried in cold water. Then add 3 ounces of paste burnt sugar color and add 85 lbs. of 4 X powder sugar and 2 lbs. of flour and mix thoroughly. Then add 2 ounces of maple flavor and 6 ounces of oil of peppermint flavor. Then finish the same as spearmint gum in rolling and handling, cutting and drying.

LICORICE STICK GUM

Place 30 lbs. of corn syrup in gum cooking kettle and cook the corn syrup to a stiff ball, or 250 degrees by the cold water test. Then add 20 lbs. of paloja gum and cook the batch until small bubbles some to the surface and break. Then add 4 lbs. of powder licorice and enough velvetine black to color the batch a strong black color, then add 75

lbs. of 4 X powder sugar and 3 lbs. of flour and 5 ounces of oil of anise flavor.

Always turn off the steam from the kettle before adding the sugar, and do not add the flavor until you have added all the powder sugar to the batch.

In coloring the batch for licorice gum, if you do not color the batch a very dark color before adding the powder sugar the amount of sugar that you must use to the batch will make your licorice stick a light color when taken from the kettle, and it is very hard to color the batch after the powder sugar is added.

SPICE STICK GUM

Place in gum cooking kettle 30 lbs. of corn syrup and cook to stiff ball when tried in cold water, then add 10 lbs. of chicle gum chopped fine and 15 lbs. of paloja gum and cook to stiff ball, or 245 degrees when tried in cold water. By testing by the use of the old method the gum is cooked when the batch clings to the sides of the cooking kettle and small bubbles form on the surface and then break. Then turn off the steam from the kettle and add 82 lbs. of 4 X powder sugar and 2 lbs. of flour. Then add 2 ounces of nutmeg that is ground very fine, 3 ounces of oil of cinnamon and 1 ounce of oil of cloves. Then finish in handling and rolling and cutting like peppermint stick gum.

ALMOND STICK GUM

Place in gum cooking kettle 30 lbs. of corn syrup and cook to stiff ball when tried in cold water, then add 25 lbs. of paloja gum and cook until the batch forms small bubbles on the surface of the batch, or when cooking by water test, cook to stiff ball when tried in cold water. Then add 5 lbs. of almond paste and turn off the steam from the kettle. Then add 75 lbs. of 4 X powder sugar, and add the sugar slowly,

about 25 lbs. at a time, so that the almond paste will be mixed to a smooth paste. Then, when you have added all the sugar, add 2 lbs. of flour and add 3 ounces of oil of almond flavor. Then finish the same as for peppermint stick in the handling and rolling and cutting.

ASSORTED FRUIT STICK GUM

Place in gum cooking kettle 30 lbs. of corn syrup and cook to a stiff ball when tried in cold water, then add 10 lbs. of chicle gum and 20 lbs. of paloja gum and cook until the batch forms small bubbles on the surface and then break, or to 245 degrees by the cold water test. Then turn off the steam from the kettle and add 85 lbs. of 4 X powder sugar and 3 lbs. of flour; then add 2 ounces of peach flavor, 2 ounces of raspberry flavor, 2 ounces of strawberry flavor, 1 ounce of oil of lemon flavor; then add 3 ounces of citric acid that is powdered fine. Then finish in handling and rolling and cutting the same as for the peppermint stick gum.

ASSORTED FRUIT FLAVOR STICK GUM

Place in gum cooking kettle 20 lbs. of corn syrup, 12 lbs. of caramel paste and cook the batch to a stiff ball, then add 25 lbs. of paloja gum and cook until the small bubbles form on the surface of the batch, or by water test cook to 245 degrees. Then add 80 lbs. of 4 X powder sugar and 3 lbs. of flour and mix thoroughly, then add 2 ounces of peach flavor, 4 ounces of raspberry flavor and 1 ounce of oil of lemon and 3 ounces of citric acid powdered very fine. Then finish in handling and rolling and cutting the same as for mint stick.

BALL CHEWING GUM CENTERS FOR THE REVOLVING PANS

In the manufacture of ball gum you must have a steam boiler, gum cooking kettle, rolls for sizing down the gum,

the ball sizing machine and the ball cutting machine. With these equipments you are in position to manufacture the centers for ball chewing gum.

For finishing the ball gum centers you must have from 3 to 6 revolving pans and 1 polishing pan, steam kettle for cooking the syrups and a fan blower for drying up the charges in the revolving pans.

BALL CHEWING GUM CENTERS

Peppermint flavor, finished in a white color.

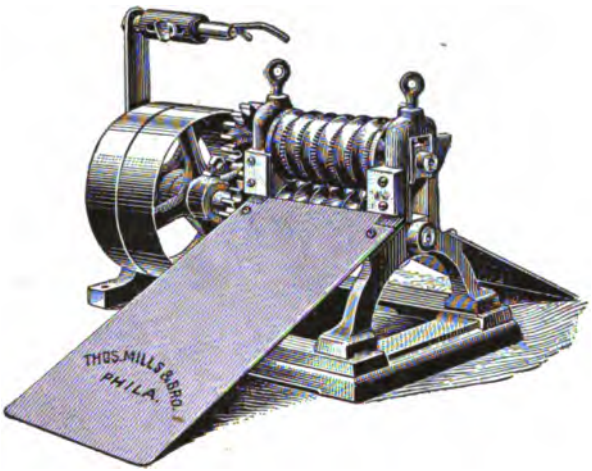
Gum Cooking and Mixing Kettle

Place in the gum cooking kettle 35 lbs. of corn syrup and cook the corn syrup to a stiff ball when tried in cold water, then add 10 lbs. of chicle and 15 lbs. of paloja gum and cook

the batch until it forms small bubbles on the surface of the batch, or, when tried in cold water, cook to 245 degrees by cold water test. Then turn off the steam and add 80 lbs. of 4 X powder sugar and add 5 lbs. of flour and mix thoroughly. Then add 7 ounces of oil of peppermint flavor and mix well through the batch. Then take out on a cooling slab or table dusted heavy with starch. Then take and knead up the batch on the slab and roll down in squares about 1 foot square with a rolling pin, then run the gum through the sizing machine.

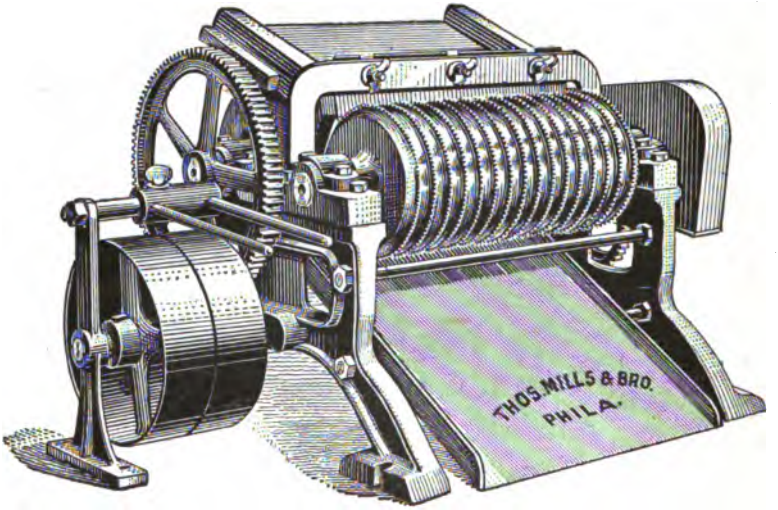
Sizing Rolls for Sizing Down the Gum. Clough & Witt Co., Cleveland, Ohio.

After the gum has been sized down through the sizing machine then cut in strips with a circle blade single cutter to fit the size of the ball sizing cutter. This cutter cuts the sheets into strips before they are cut into round balls.



Gum Ball Sizing Cutter. Thos. Mills Bros., Philadelphia, Pa.

In running the cut strips through the ball sizing machine dust the strip well with starch so that the round strips will not stick to the rolls, and place the cut strips into trays. Then they are ready to be cut into round balls by the ball cutter.



Ball Cutter for Cutting the Round Strips. Thos. Mills Bros., Philadelphia, Pa.

When cutting the strips for the sizer the strips must not be any longer than the width of the ball cutter, or otherwise the strips will not go into the machine. Then, as soon as the ball cutter finishes cutting them in round balls they are placed in trays ready to be run up in the revolving pans.

SPEARMINT BALL GUM CENTERS

Place 30 lbs. of corn syrup in the gum cooking kettle and cook to a stiff ball when tried in cold water. Then add 20 lbs. of paloja gum and cook the batch until the small bubbles form on the surface of the batch, or to 245 degrees by cold water test. Then add 70 lbs. of 4 X powder sugar and 5 lbs. of ffour and mix thoroughly. Then add 6 ounces of oil of spearmint and 1 ounce of oil of peppermint flavor and mix through the batch. Then finish the same in handling and cutting as for the peppermint stick gum.

LICORICE GUM BALL CENTERS

Place in gum cooking kettle 20 lbs. of corn syrup, 12 lbs. of caramel paste and cook to a stiff ball when tried in cold water. Then add 25 lbs. of paloja gum and finish cooking the gum until small bubbles form on the surface and break, or by water test cook to 245 degrees, then turn off the steam and add 80 lbs. of 4 X powder sugar and 5 lbs of flour and mix thoroughly, then add 3 lbs. of powder licorice and 4 ounces of oil of anise flavor. Then take out of kettle and finish the same as for peppermint centers. Finish the centers in a black color when run up in the revolving pans.

ORANGE GUM BALL CENTERS

Place in gum cooking kettle 30 lbs. of corn syrup and cook the corn syrup to a stiff ball when tried in cold water, then add 20 lbs. of paloja gum and cook the batch until the small bubbles form on the surface of the batch, or to 245 degrees by water test. Then turn off the steam from the kettle and add 75 lbs. of 4 X powder sugar and 4 lbs. of flour and thoroughly mix the powder sugar and flour in the batch, then add 6 ounces of oil of orange and 1 ounce of citric acid and mix through the batch. Then take from kettle and finish the same as for the peppermint centers. Finish the orange centers in an orange color in the revolving pans.

CARMINT BALL GUM CENTERS

Place in gum cooking kettle 30 lbs. of corn syrup, 10 lbs. of condensed milk and cook the batch to a stiff ball when tried in cold water. Then add 25 lbs. of paloja gum and cook the batch until small bubbles form on the surface of the batch and break. Then turn off the steam from the kettle and add 5 ounces of paste caramel color, then add 80 lbs. of 4 X powder sugar and 5 lbs. of flour and mix thoroughly, then add 6 ounces of peppermint flavor. Then take from

the kettle and finish handling the same as for peppermint ball centers.

Finish them in a caramel color when run up in the revolving pans.

WINTERGREEN BALL GUM CENTERS

Place in gum cooking kettle 30 lbs. of corn syrup and cook the corn syrup to a stiff ball. Then add 25 lbs. of paloja gum and cook the gum until the small bubbles form on the surface of the batch and then break, or to 245 degrees by water test. Then turn off the steam and add 80 lbs. of powder sugar and 5 lbs. of flour and mix thoroughly. Then add 7 ounces of oil of wintergreen flavor. Then take from the kettle and handle the same as for peppermint ball centers.

Finish them in a dark red color when run up in the revolving pans.

POINTERS ON BALL AND STICK GUM

Cook the gum a little higher in hot weather than in cold weather.

The powder sugar used in the manufacture of gum, the more sugar you use to the same amount of corn syrup and gum chicle or paloja, the dryer your gum stick will be.

When you use too much powder sugar to the corn syrup and chicle or paloja gum it will cause the batch to grain in the kettle and cannot be handled in rolling the gum down.

Chicle or paloja gum is the chewing qualities of the stick or ball chewing gum. The more chicle used to the same amount of corn syrup or paloja gum, the larger amount of chewing qualities each stick or ball of gum will contain, when the sugar and corn syrup are dissolved when chewing.

The less chicle or paloja gum used to the same amount of sugar and corn syrup, the less chewing qualities each stick

or ball of gum will contain when the sugar and corn syrup are dissolved when chewing.

When cooking stick or ball gum, if you cook the batch too low in hot weather your gum will sweat and stick to the wrappers and will be hard to break when cut in sticks.

When you cook the stick or ball gum too much, it will get brittle, as for a good quality of gum the stick should not be too soft or too brittle.

In handling the stick gum use plenty of starch and powder sugar when sizing down the gum, to keep the sheets of gum from sticking together. Use all starch for the roughing rolls and on the finishing rolls use some powder sugar mixed with starch, and dust each sheet of gum with some powder sugar when placed on the trays to cool before they are ready to be broken into sticks. Then always stack the sticks of chewing gum on end; never lay the stick flat, or otherwise some of the sticks will cling together and will have to be separated before they can be placed in the magazine on the wrapping machine, as sticks that cling together when fed in the magazine will cause you to stop the machine.

PAN WORK SPECIALTIES

In the manufacture of pan work specialties you must have the following equipment to start with: Revolving pans, with and without steam coils. The pans with the steam coils are used for running up the centers and the pans without coils and must have ribs on the inside of the pan. This style pan is used for polishing the centers after the goods are finished. Your plant should be equipped with a steam boiler to be used for heating the pans, and also to be used for cooking in your steam jacket kettles for cooking the different syrups used in the manufacture of running up the different class of pan specialties. In reference to how many

pans you should have in your plant you should have at least 6 revolving pans and 1 polishing pan to turn out a line of up-to-date selling specialties, and if you expect to turn out a complete line of pan work and ball gum, your plant should consist of 12 pans for running up the centers and 2 pans for polishing work, and 2 steam jacket kettles for cooking the syrups, 1 kettle that will hold about 30 gallons and 1 steam jacket kettle that will cook about 60 gallons of syrup. In cooking the syrups you should have 1 syrup gauge and 1 cooking thermometer. The syrup gauge is for low cooked syrup and the cooking thermometer is used for high cooked syrup, as for burnt almonds or burnt peanuts.

The pan department should have at least 6 different size mesh sieves, from the very finest mesh to a mesh up to five-eighths inch mesh. The fine sieve is used for sifting powder sugar and the larger size mesh sieves are used for taking out the centers from the pans, and also can be used for sorting the different sizes of centers. All of these sieves should be made so that they will go through the opening of the revolving pans.

The standard size revolving pans that are used by the pan work houses are 36 and the 38-inch pans. This is the outside dimension. The 36-inch pan has a capacity of 100 lbs. of centers, the 38-inch pan has a capacity of 120 lbs. of centers.

The pan department should have at least 200 trays or more, according to the output of your pan department. The ordinary starch tray I find is the most convenient, as they are very easily handled and can be stacked so that they take very little space.

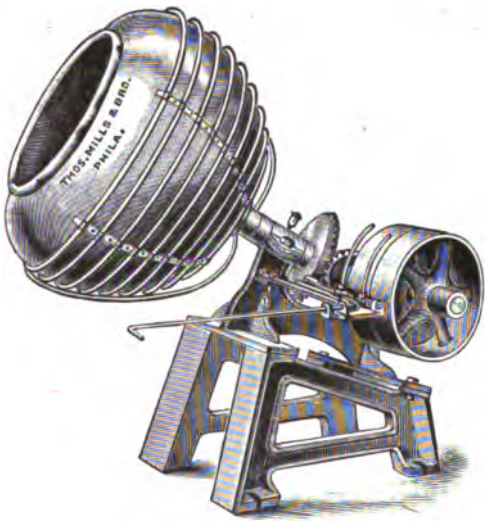
INSTALLING THE REVOLVING PANS

Place the pans so that the opening of the revolving pans will be facing the light from the windows, or otherwise the

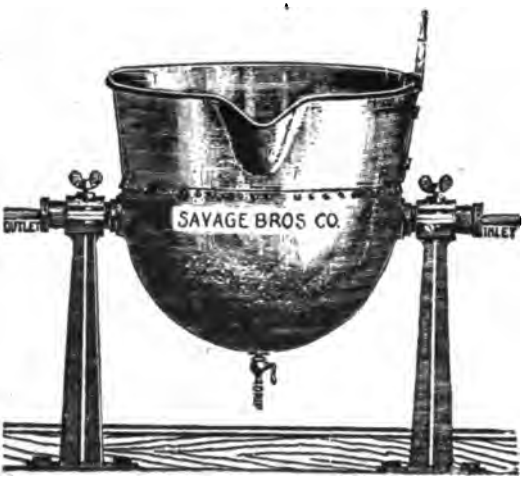
pan man will have to use artificial light, which is very hard to tell colors by. The pans must be connected up with steam, and you should have the tinner make a catch pan to receive all the drippings, which are bound to leak now and then from the valves or connections; that will keep the ~~floor~~ floor where your pans are installed dry.

In setting up the pans you should have some of the pans not to run over 18 revolutions for large centers. For small size centers your pans should run about 24 to 26 revolutions.

The polishing pan should run about 24 revolutions for jelly beans, jaw-breakers, imperials and ball chewing gum.



Engrossing Pan.



Steam Cooking Kettle.

Showing Revolving Steam Pans with Cooking Syrup Kettle.

The engrossing pan is used for engrossing up the centers at first. The finishing pan is used for finishing up the centers after they are engrossed.

The polishing pan is used for polishing only, and should have ribs on the inside of the pan one-half inch high and about 18 ribs to a pan.

Installing the pans that are to be used for running up the centers you must have a fan pressure blower with pipe connections leading to each revolving pan with a cut-off on each pipe leading to each pan, so that when adding the syrup on the centers it will not blow the syrup from the dipper by which you are adding on the syrup to the centers.

You should have covers made of tin for closing the opening of each pan when not in operation, to keep out the dust.

INSTALLING THE POLISHING PANS FOR POLISHING

The polishing pans should not be placed close to the pans that are used for running up the centers, on account of the sugar dust and starch that are used, as when goods are placed in the polishers they should be free from dust, as the dust will settle on the goods, which will cause the goods when finished to show specks through the polishing.

INSTRUCTIONS FOR RUNNING UP BALL GUM CENTERS

Gum arabic syrup for engrossing up the ball gum centers: Soak over night 8 lbs. of gum arabic in 1½ gallons of water. Then, next morning, finish melting the gum in a steam kettle with only enough heat on the kettle to melt the gum. Do not let the gum arabic boil. Now then, run the dissolved gum arabic through a very fine sieve. Now cook 18 lbs. of granulated sugar with 3 quarts of water to 35 degrees on the syrup gauge. Then add 35 lbs. of corn syrup to your 18 lbs. of cooked syrup at 35 degrees. Then add the dissolved gum arabic and mix thoroughly. Then pour out in a tin tub to cool, and when cold it is ready to be used for engrossing up the gum centers. This syrup, when cool, should test 38 degrees on the syrup gauge. If it is higher, reduce it with water to 38 degrees on the syrup gauge.

INSTRUCTIONS FOR USING THE ENGROSSING SYRUP

Place 50 to 75 lbs. of gum ball centers in each pan that is used for engrossing up the centers. Then start the pan revolving, then have a small dipper for pouring on your engrossing syrup and pour on just enough syrup to give the centers a wetting, then dust the centers well with some fine

granulated sugar to keep them from sticking together, and as soon as you add the fine granulated sugar open up the blower to dry up the charges. Then wet the centers again and then repeat as before adding fine granulated sugar until almost dry.

This wetting with the engrossing syrup should be repeated until you have the gum balls the size you want them.

INSTRUCTIONS FOR FILLING IN THE GUM BALL CENTERS

Now give your centers a small wetting with the engrossing syrup and do not use any more granulated sugar, but use 4 X powder sugar, or 2 X powder sugar, to dry up the charges , as the powder sugar is used to fill in the centers so that they can be finished. Before you add any powder sugar to your wettings be sure that all the granulated sugar from the previous wetting is all used on the centers before adding the powder sugar.

When engrossing soft goods like gum balls or jelly bean centers the 4 X powder sugar should be added slowly, as the glucose that is used in the engrossing syrup should be thoroughly dry or absorbed with powder sugar, or else your centers will sweat in the trays and stick together.

When filling in on your centers and putting on the powder sugar coating on the gum ball centers or soft jelly bean centers throw on about a scoop full at first to keep them from sticking together, then add a little at a time until they do not sweat any more. Always close the fan blower when adding the syrup or powder sugar, and as soon as you add the powder sugar, open up the blower to dry up the charges; then, when they start to dust off, take them out from the pans with a sieve and place them in trays, and do not place too many centers to each tray, so that the air will get a chance to dry them in the trays over night.

If your centers have a firm center they can be finished up the next day. As for jelly bean centers, if they are soft let stand for two days before finishing up the centers.

SYRUP TO BE USED FOR FINISHING UP THE GUM CENTERS

Cook 20 lbs. of granulated sugar with 3 quarts of water to 35 degrees on syrup gauge. Then place about 75 lbs. of the gum ball centers in the finishing pan and start the pan revolving. Wet the centers with this finishing syrup just enough to cover them well, about one-half pint of this syrup, and do not use the blast or blower at all on the finishing. In pouring on the syrup do not pour it on in a fast stream; pour it on in a fine stream. This will avoid getting the goods too warm for polishing them. Then let them roll until almost dry. Then wet them again and let roll until dry again.

They should have at least 4 of these wettings with the finishing syrup to make them gloss up so that they will take a good polish when placed in the polishing pan. Now, to tell if your gum ball centers will gloss up when polishing them, take one of the gum balls and blow your breath on it and see if it will show a gloss; then, if it don't show a gloss after putting on the four charges of finishing syrup, wet the centers again with the finishing syrup, just enough syrup to cover them well. Then try them again by blowing on one center, and if the gum ball centers blow up bright then they will polish well. It takes from 4 to 8 wettings to make the centers blow up bright. Then, when your centers blow up bright, dust them with a small half teaspoon of confectioner's French chalk for 50 lbs. of centers. If you have more centers you will have to use accordingly. Then let roll until your confectioner's French chalk is spread over the goods, then shut off the pan and turn them over by hand a couple

of times while you are getting ready to place them in the polishing pan.

NEW METHOD FOR POLISHING PAN WORK POLISHING GUM BALL OR JELLY BEANS OR HARD CENTERS

When your goods are finished and blow up bright, just before you stop the pan put one-half teaspoon of oil of Stanolax in your hand and rub it over the goods just before you shut off the pan. When putting on the oil of Stanolax the goods should roll just long enough to let the oil spread over the surface of the goods. The oil of Stanolax will disappear on the goods when spread over the goods enough. Now then, start to polish them by placing a sieve full in the polishing pan and dust them with a pinch of Carnaubia wax that is powdered very fine, and a pinch of Confectioner's French chalk; then let them roll until they show a polish, then add another sieve full until all are in the polishing pan.

When polishing with Stanolax oil and Carnaubia wax the pan should be thoroughly dry and clean, and no other wax used at all. If you use too much oil of Stanolax on the goods the goods will not polish at all.

On hard pan centers use less oil of Stanolax on the goods when polishing than you would use on soft goods.

Goods should start to polish right away, and if they do not it is because there is too much moisture in the goods.

If the goods take a polish and it is not clear, it is because the goods are too dry. The polishing pan for this method should have ribs in the pans, but not wax ribs, or the pan must not be lined with wax.

Powder Carnaubia wax can be bought at the drug stores, and should be very fine.

Oil of Stanolax can be bought at any durg store, or of the Standard Oil Co.

OLD METHOD USED FOR POLISHING PAN WORK

After your centers have been finished up and will blow up bright place in trays and let stand over night. Then melt some white beeswax and some spermaceti wax, 8 ounces of each, and mix together. Then line a box cover with wax paper and fill the box cover with this melted wax. Then, when cold, cut in small round pieces about 1½ inches in diameter, or line some small round dishes with wax paper and fill the dishes only partly full, so that the cakes will be one-quarter inch thick; that will save you the time in cutting them out of the square sheet. Now then, start the polishing pan running and put in about 25 lbs. of goods to be polished, then add a pinch of confectioner's French chalk and drop in two cakes of wax made with half beeswax and half spermaceti wax, then place 25 lbs. more of goods in the polishing pan, and as soon as you see that they have a polish take them out with a sieve. If you let them run too long with the cakes of wax in with the goods the goods will take on too much wax and they will not polish at all. Goods that have lost their polish can be placed back next day in the polishing pan and repolished by adding a very little of the confectioner's French chalk.

Pans for polishing Easter eggs as penny goods should only run 18 revolutions per minute.

SPECIAL NOTICE FOR THE MANUFACTURING CONFECTIONERS

Instructions in using the different colors and confectioner's French chalk:

In some states you are only allowed to use the vegetable colors on pan work, and in other states you are allowed to use the certified coal tar colors. So I would advise the manufacturing confectioners to look up the pure food laws gov-

erning your territory in reference to using the different colors. Some states do not allow the use of confectioner's French chalk for polishing pan work. So I would advise the readers or manufacturing confectioners to look up the laws governing the use of confectioner's French chalk or wax before using the same for polishing pan work in your territory.

INSTRUCTIONS IN USING THE DIFFERENT COLORS FOR PAN WORK

In coloring the different syrups to be used for pan work, you should never color the engrossing syrup. Only color the finishing syrup that is used for finishing up the centers.

In preparing the different colors I would advise you to buy all your colors in a powder form and mix the powder colors with a little water as you require it.

For mixing carmine red color take 2 ounces of No. 40 carmine and add enough liquid ammonia to make a paste; then add one-half pint of warm water and mix thoroughly. In mixing color in the finishing syrup so that you will know when you have the right shade of color that you want, drop a little of the colored syrup on a sheet of white paper, and always mix up enough colored syrup of the same color to finish the same batch of centers, so that the whole batch will have the same shade of color..

In making velvetine black color do not use too much water, as this color should show up very dark on the finished goods.

HOW TO MIX COLORS FOR PAN WORK

Lemon—Mix white and yellow.
Orange—Mix yellow and red.
Purple—Mix blue and red.
Gray—Mix White and black.

Green—Mix blue and yellow.

Fawn—Mix white, yellow and red.

Chestnut—Mix red, black and yellow.

Copper—Mix red, yellow and black.

Bronze—Mix yellow and a few drops of red to the water that is boiled from chicory strained through a cloth.

Black color—Use velvetine black, or powdered charcoal.

Caramel color—Take 5 lbs. of sugar with 1 quart of water and cook on the open fire in a copper kettle until it burns black. Then add 1½ pints of hot water and cook to 220 degrees.

BURNT PEANUTS OR BURNT ALMONDS

Roast 25 lbs. of almonds or peanuts a light brown color. Then sieve them so that they are free from skins or small pieces. Then place the roasted almonds or peanuts in the pan with the steam turned on the coils, so as to heat them. Now cook in steam kettle 15 lbs. of sugar with 2 lbs of corn syrup and one-half gallon of water. Cook to 242 degrees on cooking gauge. Then add a little red color and a little caramel color. Then pour out in a pail and flavor with one-half ounce of oil of cinnamon. Then pour your cooked syrup on with a small dipper until the almonds are thoroughly wet, and keep on charging with the syrup until it is all used up. In charging with the syrup, if the almonds start to cling they must be separated by passing your hand through the almonds. Then cook another batch of syrup with 17 lbs. of sugar and 2 lbs. of corn syrup and one-half gallon of water. Cook to 245 degrees, and if your second batch of syrup is not ready by the time you have used up the first batch, stop the pan and also turn off the steam while the pan is not running. You should have these batches coming so by the time you had the first syrup the second batch is ready to be used for charging with. Color and flavor this

batch the same as the first batch; then charge with this second batch until all the syrup is used up. Then have the third batch cooking—20 lbs. of sugar, 2½ lbs. of corn syrup, with 3 quarts of water. Cook to 255 degrees. Then color and flavor with one-half ounce of oil of cinnamon. Then charge with this syrup until the batch of syrup is used up. Then they are ready to be glazed with confectioner's glaze or with gum arabic.

GUM ARABIC GLAZE FOR GLAZING BURNT ALMONDS OR PEANUTS

Melt 3 lbs. of gum arabic in 5 lbs. of water over night. Then, next morning, dissolve the gum arabic in a steam kettle by a little heat. Then, when thoroughly dissolved, strain through a very fine sieve. Then add one-half pound of corn syrup to this hot gum and mix thoroughly. Then it is ready to be used for glazing the burnt almonds.

This gum should always be soaked in water the day before you intend to run up the burnt almonds, and the gum solution should be put on the almonds while the almonds are warm, so that the gum will dry on the almonds, or if you had a drying room the almonds will dry better than out where it is cool. As the almonds will cling together when given a gum arabic coating, they must be loosened up by shaking the trays. Then let stand until they are thoroughly dry, then pack. By using the confectioners' glaze you do not have to place them in the drying room. They will dry in 2 or 3 hours, and should be put on the almonds cold.

You can make these almonds smooth by cooking to 245 degrees and then use the pearling pot to make them rough, which is done in the large pan houses of the country.

Pearling Pot for Pearling Burnt Peanuts or Almonds.
Thos. Mills Bros., Philadelphia, Pa.

Syrup to be used in pearling pot for pearling burnt almonds or peanuts: Soak over night 3 lbs. of gum arabic in 1½ quarts of water. Then, next morning, dissolve the gum arabic by placing it in a steam kettle with a little heat turned on the kettle. Now cook in steam kettle 20 lbs. of sugar with two-thirds gallon of water, and cook to 39 degrees on crystal gauge. Then take 5 lbs. of this crystal syrup that is cooked to 39 degrees and 1 pint of gum arabic and mix together. Then color the syrup with caramel color and a little red color, so that the mixture in the pearling pot will have the same color as the burnt peanuts or almonds. Then place the mixture in the pearling pot and regulate the discharge by the center pin that is in the center of the pearling

pot. Then regulate the center pin so that syrup will not run in too large a stream on the almonds while revolving in the pan. The goods should be kept warm while adding the pearling syrup on the goods.

CRYSTALLIZED CREAM ALMONDS OR FILBERTS

Place 20 lbs. of almonds or filberts in the pan. Then turn on the steam on the pan so as to heat the almonds. Now cook 3 batches of syrup and have the second batch of syrup ready by the time the first is used up and have the third batch cooked by the time the second batch is used up on the goods..

Batch No. 1—Cook in steam kettle 35 lbs of sugar with 2 lbs. of corn syrup and 1 gallon of water, and as soon as your batch comes to a boil wash the sides of the kettle with a brush dipped in water, then place a steamer on the kettle and cook the batch to 245 degrees. Then pour out in a tin tub or kettle and place the syrup by the pans that you are running up the almonds in. Then flavor the first batch of syrup only with 2 ounces of vanilla flavor, or use a little vanilla crystals. Then start to put on the charges of syrup, and use a small dipper that will hold about one-half pint, with a handle 12 inches long. Always let the charge of syrup dry before putting on the next charge of syrup, and continue charging with this syrup until it is all used up.

Then cook batch No. 2 syrup. Cook in steam kettle 35 lbs. of sugar, 2 lbs. of corn syrup, with 1 gallon of water. Cook to 246 degrees. Then continue charging with this syrup with a small dipper and pour on in a fine stream, and always let each charge get thoroughly dry before adding the next charge of syrup.

Now cook batch No. 3 in steam kettle, 35 lbs. of sugar, 2 lbs. of corn syrup, with 1 gallon of water. Cook to 247

degrees and then add a few drops of blue color to bleach out the white, then finish charging with this syrup the same as with the other batches, until it is all used up.

In running up cream almonds or filberts just keep the revolving pan lukewarm. Do not let the pan get too hot, or your goods will get too dry. Then, after they are thoroughly dry, place in crystal at 33½ strong. Then finish like for other crystallized goods.

RUNNING UP HARD GOODS CENTERS IN THE PANS

Gum syrup used for engrossing up hard goods centers:

Soak 8 lbs. of gum arabic in 1½ gallons of water over night. Then, next morning, finish melting the gum arabic in a steam kettle with only enough heat on the kettle so that the gum will dissolve. Then run the gum solution through a very fine sieve.

Now cook 18 lbs. of granulated sugar with 3 quarts of water to 36 degrees on the crystal gauge. Then add 25 lbs. of corn syrup and mix thoroughly, then add the dissolved gum arabic and let cool in a tin tub. When cold it is ready to be used for engrossing up the centers. This syrup, when cold, should test 38 degrees on crystal gauge.

INSTRUCTIONS FOR USING ENGROSSING SYRUP FOR THE HARD GOODS CENTERS

Place 50 lbs. of hard centers in your pan that is used for engrossing work and then start the pan revolving. Then have a small dipper for pouring on the syrup, and only pour on enough of the engrossing syrup to wet the centers, so that the hard goods centers are covered well, then dust them well with some fine granulated sugar to keep them from sticking together. Then keep on working on the

granulated sugar until the hard centers are dry enough so that they will not take on any more sugar. Then wet the centers again and repeat as before, adding fine granulated sugar until almost dry.

INSTRUCTIONS FOR FILLING IN ON HARD GOODS CENTERS

Now give the centers a small wetting with the engrossing syrup, and do not use any more granulated sugar, but use 4 X powder sugar or 2 X powder sugar to dry up the charges, and in putting on the charges always put the blower on the centers as soon as you add the sugar, and always close the cut off on the blower while adding the syrup, or the blower will blow the syrup all over or out of the dipper. The 4 X powder or 2 X powder sugar is used to dry up the charges and will give the centers a smooth finish or surface so that they can be finished easier.

Before adding the powder sugar be sure that all the granulated sugar from the previous wetting is all worked on your centers before the powder sugar is added.

INSTRUCTIONS FOR FINISHING THE HARD GOODS CENTERS

Syrup used for finishing hard goods centers:

Cook in steam kettle 20 lbs. of granulated sugar, 3 quarts of water. Cook to 35 degrees on crystal gauge. Now place about 50 to 75 lbs. of centers in the pan that is used for finishing up the centers and wet the centers with this finishing syrup just enough to cover them well, and pour on the charges with a small dipper, about one-half pint of syrup to 75 lbs. of centers, and do not use the blast at all for the finishing. In pouring on the syrup do not pour the syrup on too fast. Always pour the syrup on in a fine stream. Then let them roll until almost dry, then wet them again

and let roll until dry. They should have at least 4 wettings of this finishing syrup to make them gloss up so that they will take a good polish when placed in the polishing pan.

Now to tell if your goods will gloss up when polishing them in the polishing pan, take one of the centers in your hand and blow just an ordinary breath on the center, and if the center shows up with a gloss then it is ready for the polisher pan. If the center does not gloss up after putting on the 4 wettings, give them another wetting, and then try again to see if they gloss up. It takes 4 to 8 wettings to make the goods gloss up well.

Then, when your goods gloss up bright, dust them with a small teaspoonful of confectioner's French chalk, if the confectioner's French chalk is not prohibited in your locality, as some states do not allow the use of confectioner's French chalk. Then let the centers roll until the confectioner's French chalk is spread over the goods. Then shut off the pan and turn them over by hand a couple of times. Then take out with a sieve and place in trays and let stand over night. Then place them in the polishing pan and polish them according to instructions for polishing work.

In coloring the different kinds of centers, like cinnamon imperials, only color the finishing syrup, and always put the flavor in the engrossing syrup and the centers.

COLORS USED IN FINISHING THE FOLLOWING PAN SPECIALTIES

Jelly beans are finished in white, yellow, pink, black and orange.

Imperials are finished in white, pink, green, orange and yellow.

Cinnamon imperials are finished in a dark red color, flavored with cinnamon.

Cream eggs, small size, are finished in white, pink, yellow, green and orange.

Marshmallow eggs, penny goods, white, yellow, pink and orange.

Cupid Mix is finished in white, pink, red, yellow, orange, green and lavender.

Jelly eggs, Easter assortment, are finished in white, yellow, red, orange, lavender and green.

Licorice cubes are finished in black.

Candy cherries are finished in a brilliant rose color, a dark shade.

Candy apricots are finished in a light orange color.

Cough drops are finished in a black color.

Fourth of July assortments are finished in white, red and blue.

Clove assortments are finished in white and pink.

Jaw breakers are finished in white, red, orange and black.

Shell mix assortment, finished in white, black, lavender, orange, and yellow.

Jordan's almonds are finished in white, pink, orange, yellow and lavender.

Assorted fruit drops, finished in yellow, orange, red and green.

Anise drops, finished in a brilliant rose color.

How to speckle cream Easter eggs after they are polished in the polishing pan:

In making the cream eggs in the pans, engross them and finish them the same as for running up jelly bean centers, then polish them the same as for the jelly beans.

Now let the cream eggs stand over night in trays after they are polished. Then, next morning, start to speckle them.

You should have some trays with wire screen bottoms, then place the eggs in the trays and only cover the bottom of the wire screen trays with eggs. Then place some color

on a saucer, whatever color you expect to use, and add a little of your gum arabic solution and mix thoroughly. Then take an ordinary paint brush and dip it in the color. Then take a small stick and tap the brush lightly once or twice. Then hold the brush over the tray of eggs, then move the brush over the eggs and touch the brush very lightly with a small stick so that the color will drop on the eggs and leave small spots of colors.

On white color eggs use green and red and blue or lavender.

On yellow color eggs use red and green.

On pink color eggs use red and orange.

PEARLED CARAWAY SEED OR ANISE SEED

Take 25 lbs. of caraway or anise seed and thoroughly sieve them, and in sieving the caraway seed use a sieve with a mesh that will leave all the fine dust go through the sieve. Then hold the sieve on the blast and open the blast on the blower very slowly, so that the blast will blow all the stems which are among the caraway seed. Now place the caraway seen in the pan and give them a wetting with syrup mixed with a gum solution, 4 pints of syrup to 1 pint of gum solution. Then dry up the charges with 4X or 2X powder sugar with a little heat turned on the pan, so that the pan is only lukewarm. Then give them 3 charges of the syrup and gum and use the blower for drying up the charges after the powder sugar is added.

Now for finishing, cook 30 lbs. of sugar, 1 gallon of water and 2 lbs. of corn syrup. Cook to 36 degrees on syrup gauge. Then keep on charging with this syrup until all used up. Then cook another batch of syrup of the same amount and cook this syrup to 37 degrees. Then keep adding this syrup until you have used 4 batches of syrup, and make the caraway seed in white, yellow and red colors.

For pearling the caraway seed, place 3 lbs. of syrup that is cooked to 36 degrees and add one-half pint of gum solution and mix thoroughly. Then heat the pan a little with the caraway in the pan revolving, then place the syrup in the pearling pot and regulate the center pin so that the syrup will drip in a fine stream on the goods while revolving on the pan. You must color the syrup that is used in the pearling the same color that your finished caraway seed is.

For running up the anise seed, they can be run up smooth or can be pearled. When run up smooth, place in the polishing pan and polish.

ASSORTED JORDAN ALMONDS

Instructions for running up smooth almonds:

Gum solution used for giving the almonds the different wettings: Soak over night 5 lbs. of gum arabic in 1 gallon of water. Then, next morning, dissolve the gum by a little heat in the steam kettle. Then strain through a very fine sieve.

Now cook 20 lbs. of granulated sugar with 3 quarts of water. Cook to 36 degrees on crystal gauge. Then add 20 lbs. of corn syrup to your syrup that is cooked to 36 degrees. Then pour out in tin tub and add the dissolved gum arabic and thoroughly mix together. Then it is ready to be used for engrossing up the almonds. This syrup, when cool, should test about 37 to 38 degrees on syrup gauge.

INSTRUCTIONS FOR USING ENGROSSING SYRUP

Place 25 lbs. of Jordan almonds that have been brushed and sieved in the revolving pan, and start the pan revolv-

ing with no heat turned on the pan. Then give the almonds a wetting with the engrossing syrup, and use a small dipper and pour on about one-half pint, then let them revolve so that the syrup is thoroughly spread over the almonds. Then sprinkle some very fine granulated sugar, just enough so that the sugar will keep the almonds from sticking together. Then add some 2 X powder sugar for drying up the charges. Then let them revolve until they are thoroughly dry. Then take them out and sieve them. Then place in your trays and let stand over night. Then, next morning, place them in the pan to be run up smooth.

INSTRUCTIONS FOR RUNNING UP THE ALMONDS

Syrup for running up the almonds: Cook in steam kettle 25 lbs. of sugar, 1½ lbs. of corn syrup, with 1 gallon of water. Cook to 38 degrees on syrup gauge. Then pour out in a tin pail. Then add about 5 ounces of corn starch in 1 pint of water and pour this corn starch in the cooked syrup and mix thoroughly. Then add 1 pint of the gum solution and mix thoroughly. Now then heat the pan warm only, and start to charge with this engrossing syrup. Pour about one-half pint of this engrossing syrup on the almonds and then open up the blower and dry up the charge, and as soon as you see that the charges start to dust, add another charge of syrup, and continue charging with this syrup until you have put on about 8 to 10 charges, and always open up the blower as soon as you pour on the syrup, and pour the syrup on in a fine stream, then close the pressure blower when adding the syrup or the air pressure will blow the syrup all over and from the small dipper you are using.

After you have the almonds as large as you want them, then start to finish the almonds.

INSTRUCTIONS FOR FINISHING THE ALMONDS IN FINISHING PAN

Syrup to be used for finishing: Cook in steam kettle 20 lbs. of sugar, 1 lb. of corn syrup, 3 quarts of water. Cook to 34 degrees for the white Jordan almonds and 35 degrees for the colors. Then do not leave any heat on the pan, and pour this finishing syrup out in a tin pail and start to charge with this syrup, and give them about 5 to 7 charges, and dry up the charges with the blower. After 5 charges do not use the blower at all, and sprinkle the syrup for the last two charges with a little water, so that it will reduce the batch of syrup from 34 degrees to 32 degrees for the white, or 33 for the colors.

In coloring the Jordan almonds as for pink, lavender, orange and yellow colors, color only the finishing syrup, and always make your colors a light shade.

In flavoring the Jordan almonds, flavor the engrossing syrup only. Do not use any flavor on the finishing syrup.

Now to tell if your Jordan almonds will have a fine finish, take one of the almonds and blow your breath on it, and if the almond will gloss up bright, then you know that it will take a good polish. I always prefer the Jordan almond with the high finish instead of the dull finish, as most of them are turned out with a dull finish. Now then, when your almonds blow up bright, dust them with one-half teaspoonful of confectioner's French chalk. Then let them revolve until the confectioner's French chalk is spread over the almonds. Then stop the pan and turn the pan over by hand two or three times. Then take them out with a sieve and place in trays over night, then polish them next morning.

IMITATION JORDAN ALMONDS

No. 1. Make the center out of hard goods and flavor with oil of almond, and pull the batch white before run-

ning through the almond shaped rolls. Then finish the batch in different colors and flavors, the same as for Jordan almonds.

No. 2. Make a cream with almond paste used for flavor, then run in starch in almond shaped mold. Then finish the same as for Jordan almonds, in different colors.

MARSHMALLOW PENNY EGGS OR SMALL BIRD EGGS

Gum syrup for engrossing up the marshmallow eggs:

Soak over night 8 lbs. of gum arabic in 1½ gallons of water. Then next morning finish melting the gum by a little heat in a steam kettle. Then, when thoroughly dissolved, strain through a very fine sieve. Now cook 20 lbs. of granulated sugar and 3 quarts of water to 37 degrees on syrup gauge. Then add 20 lbs. of corn syrup and mix thoroughly. Then mix the dissolved gum arabic with the cooked syrup and corn syrup and mix thoroughly. Then pour in a tin tub, and it is ready to be used for running up the marshmallow eggs.

INSTRUCTIONS FOR USING ENGROSSING SYRUP

Place 50 lbs. of marshmallow eggs in the pan that is used for engrossing up your centers and start the pan revolving. Then have a small dipper for pouring on the engrossing syrup, and pour on just enough of the syrup to wet the marshmallow eggs so as to cover them well. Then dust them well with some fine granulated sugar to keep them from sticking together. Then keep working on the fine granulated sugar until the marshmallow eggs are dry enough so that they do not take on any more sugar. Then wet your centers again, and repeat as before by adding fine granulated sugar until almost dry. These wettings should be re-

peated until you have the space filled in where the two halves are stuck together on the penny marshmallow eggs. For the small eggs, they do not have any space to fill in.

INSTRUCTIONS FOR FILLING IN THE MARSHMALLOW EGGS

Now give your marsmallow eggs a small wetting with the engrossing syrup and do not use any granulated sugar, but use 2 X powder sugar to dry up the charges, as the 2 X sugar is used for giving the eggs a smooth surface, so that they can be finished easier.

Before adding the 2 X sugar be sure that all the granulated sugar from the previous wetting is all worked on the eggs before the powder sugar is added.

When engrossing soft goods like marshmallow goods, the 2 X powder sugar should be added slowly, as the corn syrup that is used in the engrossing syrup should be thoroughly dry by the blower, and the powder sugar will absorb the moisture, or otherwise the eggs will sweat in the trays and stick together.

When filling in on the eggs and putting on the powder sugar coating on the egg centers throw on about a scoop full at first to keep them from sticking together, then add a little at a time until they do not sweat any more. Then let them roll about 10 minutes. Then take them out from the pan with a sieve and place them in trays. Then do not place too many in each tray, so that the air will get to the marshmallow eggs. If your marshmallow eggs are firm they can be finished up the next day.

SYRUP TO BE USED FOR FINISHING THE MARSHMALLOW EGGS

Cook 20 lbs. of granulated sugar with 3 quarts of water. Cook to 35 degrees on syrup gauge. Then place about 50

lbs. of the marshmallow eggs in the finishing pan and start the pan revolving, and wet the centers with this finishing syrup just enough to cover them well, about one-half pint, and do not use the blast blower for drying up the finishing charges. In pouring on the syrup do not pour on the syrup too fast, but pour the syrup in a fine stream. Then let the marshmallow eggs roll until almost dry, then give them another wetting and let roll until dry. You can always tell when the goods are dry by rubbing your hand on the goods while revolving, and as soon as they dust off it wil show on your hand.

The marshmallows should have at least from 4 to 8 finishing charges to make them gloss up so that they will take a good polish when placed in the polisher next day.

Then, when your goods blow up bright, dust them with one-half teaspoonful of confectioner's French chalk. Then let roll until the confectioner's chalk has spread over the eggs. Then shut off the pan and turn them over by hand a couple of times with a cover placed on the opening of the pan. Then take out with a sieve and place in trays, and next morning polish in the polishing pan.

ASSORTED JAWBREAKERS

Centers for jawbreakers: Cook by vacuum kettle 100 lbs. of sugar, 50 lbs. of corn syrup, 3½ gallons of water. Cook to 240 degrees in the melting kettle and then finish cooking in the vacuum pan. Use instructions for cooking on vacuum. Then, when your batch is cooked and cooled on the slab run out by drop roll machine in a small lemon drop shape about the size of a pea. Then run them up in the pans.

GUM SYRUP USED FOR WETTING THE CENTERS

Soak 5 lbs. of gum arabic in 1 gallon of water over night.

Then, next morning, finish melting the gum arabic in the steam kettle with a little heat, so that the gum will be thoroughly dissolved. Then strain through a fine sieve. Now cook 20 lbs. of sugar with 3 quarts of water to 37 degrees on the syrup gauge. Then add 25 lbs. of corn syrup and mix thoroughly. Then pour out in a tin tub and add the dissolved gum arabic and mix thoroughly. Then, when cool, this syrup should test 38 degrees on syrup gauge.

Now place 50 to 75 lbs. of centers in the pan that is used for engrossing work and start the pan revolving. Then start to charge with the gum syrup, about one-half pint at a time, and only pour on enough syrup to wet the centers well. Then dust the centers with some fine granulated sugar that is used to keep the centers from sticking together. Then keep on working on the granulated sugar until the hard centers are dry enough so that they will not take on any more sugar. Then wet the centers again, and repeat as before, adding fine granulated sugar until almost dry.

INSTRUCTIONS FOR FILLING IN ON THE JAW-BREAKER CENTERS

Now give the centers a small wetting with the engrossing syrup, and do not use any more granulated sugar, use 2 X powder sugar to dry up the charges, and in putting on the charges always use the pressure blower for drying up the charges, and always close the slide or shutter on the blower when adding the syrup, or the blower will blow the syrup out of the dipper that you are charging with. The 2 X sugar is used for drying up the charges and for filling in on the centers so that they will have a smooth surface.

INSTRUCTIONS FOR FINISHING THE JAW-BREAKERS

Syrup for finishing the jawbreakers: Cook in steam kettle 20 lbs. of granulated sugar, 2 lbs. of corn syrup, with

3 quarts of water. Cook to 38 degrees on syrup gauge. Now place 50 to 75 lbs. of centers in the pan and put on the charges in different colors. Put on 3 charges of white, then 3 charges of finishing syrup colored with a dark red color, then 3 charges of white finishing syrup, then 3 charges of velvetine black color, then 3 charges of white and then three charges of green; then, when they run about 120 to a pound, finish in black with velvetine black color, and for the last 2 charges do not put any flavor in the finishing syrup. Add the anise flavor in the red and green charges. For the white finished jawbreakers color the different charges in red, orange, lavender and yellow, last 4 charges finish in white. For the orange jawbreakers color the different charges in white, red, green, black and finish in orange color. On the last 4 to 5 charges your finishing syrup should be reduced to 35 degrees and for finishing they should have at least 4 charges, and do not use the blower pressure on the last 2 charges for finishing. Now to tell if your jawbreakers will gloss up when polishing them, take one of the jawbreakers in your hand and blow your breath on the jawbreaker, and if the jawbreaker shows up with a gloss, then it is ready for the polishing pan next morning. If the jawbreaker does not gloss up bright, then give them another wetting and try them again, and do not use any blast on these finishing charges.

It takes from 4 to 6 charges to make them gloss up good. Then, when the jawbreakers gloss up bright, dust them with one-half teaspoonful of confectioner's French chalk. Then let the centers roll until the confectioner's French chalk is spread over the jawbreakers, then stop the pan and close the opening of the pan and turn the pan over by hand two or three times. Then take out with a sieve and place in a tray and let stand over night. Then, next morning, place them in the polisher and polish them according to instructions for polishing.

IN BOILING SUGAR BY THE COOKING GAUGE OR THERMOMETER

Pearl	220 degrees.
Small thread	228 degrees.
Large thread	236 degrees.
Soft ball	240 degrees.
Stiff ball	245 degrees.
Light crack	250 degrees.
Crack	260 degrees.
Hard crack	285 degrees.

IN BOILING SUGAR BY THE SYRUP GAUGE OR SACCHAROMETER

Pearl	25 degrees.
Thread	30 degrees.
Blow	34 degrees.
Feather	36 degrees.
Ball	50 degrees.

WATER USED TO EVERY 100 LBS. OF SUGAR FOR SYRUPS

100 lbs. of sugar, 23 lbs. of water, test 39 degrees by syrup gauge.

100 lbs. of sugar, 26 lbs. of water, test 37 degrees by syrup gauge.

100 lbs. of sugar, 30 lbs. of water, test 35 degrees by syrup gauge.

100 lbs. of sugar, 35 lbs. of water, test 33 degrees by syrup gauge.

100 lbs. of sugar, 40 lbs. of water, test 32 degrees by syrup gauge.

SUGAR TEST BY COOKING GAUGE

32 degrees on syrup gauge, test 220 degrees on cooking gauge.
33 degrees on syrup gauge, test 222 degrees on cooking gauge.
34 degrees on syrup gauge, test 224 degrees on cooking gauge.
35 degrees on syrup gauge, test 226 degrees on cooking gauge.
36 degrees on syrup gauge, test 228 degrees on cooking gauge.
37 degrees on syrup gauge, test 230 degrees on cooking gauge.
38 degrees on syrup gauge, test 232 degrees on cooking gauge.
39 degrees on syrup gauge, test 234 degrees on cooking gauge.
40 degrees on syrup gauge, test 236 degrees on cooking gauge.

INSTRUCTIONS FOR PAN WORK

Soak gum arabic over night in water, before finishing melting.

When placing centers in trays, always let the air reach the goods.

When charging with gum or syrup, do not get the goods too wet.

When using pressure blower, close slide on blower when adding syrups.

When cooking syrups, always skim the top of the syrup before it comes to a boil, with a very fine skimmer.

When running up soft centers, do not use any heat on the pans.

When putting on the syrup use a small long-handled dipper, and pour the syrup on in a fine stream.

In using colors never color the engrosser syrup; add the color in the finishing syrups.

For No. 2 pan work you can use flour to dry up the charges on the engrossing syrup, then finish with sugar syrup.

For polishing pan work the pan should have ribs one-half inch high and about 18 ribs to the pan. These ribs are used for keeping the goods from sliding in the pan, as the goods must roll to take on a good polish.

In polishing pan work you must never mix the different colors in the polishing pan. Always mix the colors in making an assortment on a table. Polish the white always first, then polish the other colors, each color one at a time, and always keep the black color for the last polishing.

If you add too much wax on the goods in the polishing pan they will take on too much wax and will not polish at all.

Goods that have lost their polish can be placed back next day in the polishing pan and repolished by adding some confectioner's French chalk. You must not use confectioner's French chalk for polishing in the states that prohibit the use of confectioner's French chalk in the manufacture of pan goods, and the same with coal tar colors; they are prohibited in some of the states.

You must use vegetable colors in the states that do not allow the use of coal tar colors in confections.

All pan goods should be thoroughly dry before being packed in boxes, pails or barrels.

Gasoline will disolve spermacetti or beeswax when left stand in a closed fruit jar.

Gasoline will cut gum chicle or paloja gum from the kettles or pans so that they can be cleaned.

COMPRESSED MINT LOZENGE WORK

In the manufacture of compressed mint lozenges or tablets, when making this class of goods the utmost care and cleanliness must prevail, because there is nothing in the confectionery line that is so delicate to make as a white mint

lozenge or tablet. The equipment that must be used for manufacturing this class of goods as compressed tablets or lozenges is the mixers for mixing the powder sugar and corn syrup and water.

No. 21 Granulating Mixer.
F. J. Stokes Machine Co., Philadelphia, Pa.

Now when the sugar mixture is thoroughly dry it is reduced to a granulate by running through the grinding mill, which should be regulated so that it will grind coarse.

No. 64 Grinding Mill.
F. J. Stokes Machine Co., Philadelphia, Pa.

INSTRUCTIONS FOR THE MANUFACTURE OF COMPRESSED MINT TABLETS

Compressed mint tablets or lozenges are made from 4 X powder sugar, corn syrup, flavor and stearic acid.

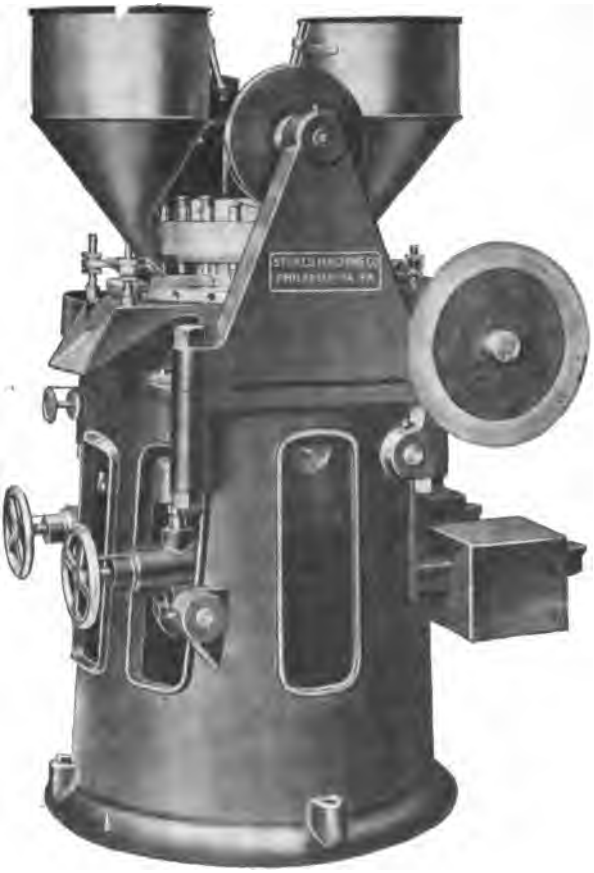
Now place 50 lbs. of 4-X powder sugar in the granulating mixer and to this 50 lbs. of powder sugar add 28 ounces of glucose and water, 50 per cent of each. This corn syrup and water mixture is added slowly so that no large wet lumps are formed. After mixing for 10 minutes the damp sugar is spread out on trays about 1 inch deep and then placed in a drying closet, The sugar, when it comes from the mixer should be damp and readily molded when pressed

in the hand, but should not be wet enough to form a dough, as this heavy material will not dry properly.

Now then, when the sugar mixture is dry, it is reduced to a granule by running through the No. 64 drug grinding mill, which should be set to grind coarse, There will be some fine powder, but there will be enough coarse material so that the granulation will feed into the compressing machine properly.

Now then, the sugar that has been run through the drug grinding mill is then put back in the mixer to be flavored with 3 ounces of oil of peppermint for white mint lozenges or tablets, and mix in the mixer for 10 minutes. When the flavor is thoroughly mixed add 4 to 6 ounces of powder stearic acid and mix thoroughly. This stearic acid is used for lubricating the material so that it does not stick to the punches and dies of the compressing machine. The amount of stearic acid that is required depends on the condition of the granulation. If there is a large amount of fine powder the full amount of 6 ounces of stearic acid must be used. If the granulation is coarse the 4 ounces can be used.

After the stearic acid is added the material is run through the compressing machine.



Compressing Machine for Making the Tablets.
F. J. Stokes Machine Co., Philadelphia, Pa.

Adjustments being made on the compressing machine for the weight of the tablets and for the pressure, they should then be allowed to harden for a day or two before being wrapped.

When making other flavors besides peppermint it is advisable to have two mixers, one for the peppermint flavor

and the other for the more delicate flavors.. If you have only one mixer it should be thoroughly cleaned when changing from peppermint flavor to any of the other flavors, as wintergreen or fruit flavors.

These tablets are mostly sold in 5-cent packages and made in round shape, oval shape and square shape and are wrapped by the automatic wrapping machine which is made by the Package Machinery Co., of Springfield, Mass.

These tablets or lozenges can be sold to the drug trade and made in all different colors and flavors.

COMPRESSED MINT LOZENGES

Soak over night 4 ounces of egg albumen in 1 pint of water. Then place 50 lbs. of powder sugar in the mixer. Now take 14 ounces of corn syrup and mix with the dissolved egg albumen that has been strained through a very fine strainer and mix together. Then add this egg albumen and corn syrup mixture slowly on the powder sugar that is in the mixer, going, so that no large wet lumps are formed. Then mix the batch for 10 minutes, then spread the damp sugar out on trays about 1 inch deep and place the trays in the drying closet. The sugar as it comes from the mixer should be damp and readily molded when pressed in the hand, but should not be wet enough to form a dough, as this material will not dry properly. Then, when the sugar mixture is thoroughly dry, it is reduced to a granule by running through the grinding mill, which should be set to grind coarse. Then place back into the mixture and add 3 ounces of oil of mint flavor and thoroughly mix, then add 4 to 6 ounces of stearic acid, according to the granulation; if coarse use only 4 ounces, if fine use 6 ounces. Then, after the stearic acid is added, the material is run through the compressing machine. Then place in trays to dry for 2 days, then wrap on automatic wrapping machine in 5-cent packages.

SPEARMINT COMPRESSED TABLETS

Soak over night 4 ounces of powder gum arabic in 8 ounces of water. Soak over night 2 ounces of egg albumen in 8 ounces of water. Then place 50 lbs. of 4 X powder sugar in the granulating mixer. Then strain the dissolved gum arabic and egg albumen through a fine sieve, then add 14 ounces of corn syrup and mix all three together. Then start the mixer and add slowly the mixed syrup and gum so that no large wet lumps are formed. Then let mix for 10 minutes, then the damp sugar is spread on trays about 1 inch deep and placed in a drying closet or dry room to get thoroughly dry before it can be run through the drug grinding mill.

The sugar mixture, when it comes from the mixer, should be damp so that it can be readily molded when pressed in the hand. The sugar mixture should never be wet enough to make a dough, as this heavy mixture will not dry properly. Now then, when the sugar mixture is thoroughly dry it is ready to be run through the drug grinding mill, which should be set to grind coarse. There should be some fine powder, but enough coarse material so that the granulation will feed into the compressing machine properly. Then the granulation mixture is placed back in the mixer, where the flavor is added, and add 2½ ounces of spearmint flavor and one-half ounce of peppermint flavor, and mix in the mixing machine for 10 minutes. After the flavor is thoroughly mixed, add from 4 to 6 ounces of powder stearic acid and thoroughly mix through the batch, as this stearic acid is used to lubricate the mixture so that the mixture does not stick to the punches and dies of the compressing machine. The amount of stearic acid to be used to the mixture always depends on the condition of the granulation. If the granulation is coarse it does not require as much stearic acid as if the granulation is fine. After the stearic acid is thoroughly mixed in the mixture it is run through the compressing ma-

chine. Then the adjustments being made for the weight of the tablets and for the pressure, the tablets are placed on trays and allowed to dry and harden for one or two days. Then they are wrapped in 5-cent packages by the wrapping machine.

BLACK COUGH TABLETS FOR THE DRUG TRADE

Cook 1 ounce of horehound herb in 1 quart of water so that when it is strained it will be cooked down to 1 pint of horehound water. Now then add to this 16 ounces of horehound water 14 ounces of corn syrup and mix thoroughly. Then place in the mixer 50 lbs. of powder sugar and add slowly this syrup mixture so that no large wet lumps are formed, then let mix for 10 minutes, then spread the damp sugar out on trays to dry. Then, when the sugar mixture is dry and run through the grinding mill, it is placed back into the mixaure to be flavored and colored. To granulation mixture add 1 lb. of powder charcoal, 1 ounce of oil of anise, one-half ounce of oil of wintergreen and 8 ounces of powder licorice. After the flavors are thoroughly mixed add 6 ounces of stearic acid and mix thoronghly, then run the mixture through the compressing machine and press out in a square shaped tablet. They can be sold in bulk or small packages.

FOR MENTHOL HOREHOUND TABLETS

Use the same instructions and formula as for mint tablets, only in place of oil of peppermint use: 1 pint of horehound water to the 14 ounces of corn syrup and make a strong tea; use 2 ounces of herb boiled in 1 quart of water, and color the granulation mixture with burnt sugar, color a light brown color. Then use 1 ounce of menthol crystals for flavor.

TART FRUIT TABLETS

For lemon use 3 ounces of oil of lemon and 3 ounces of powder citric acid.

For orange use 3 ounces of oil of orange and 3 ounces of citric acid.

For strawberry use 5 ounces of true fruit strawberry flavor and color a pink color and use 4 ounces of citric acid.

For lime use 3 ounces of oil of lime flavor and 4 ounces of citric acid.

With the mixers, drug grinding mill and compressing machine in your plant you can produce all sorts of pharmaceutical products, which will find a ready sale to the drug trade.

COMPRESSED TABLETS MADE ROUND, OVAL OR SQUARE SHAPE

You can also make these compressed tablets from gum arabic, gum tragacanth and egg albumen.

The gum arabic must be soaked over night, then thoroughly dissolved and strained through a very fine strainer or cloth. In using the dissolved gum arabic the powder is moistened with the gum and corn syrup, but the mixture must be spread out on trays in the drying room to dry, so that it can be granulated by running through the drug mill, before it can be run into the compressing machine.

The tablets cannot be made from a dough mixture and then dried afterwards. The hardness of the tablet is obtained by the very tense pressure of the machine, and augmented by leaving a little percentage of moisture in the tablets, which, on drying, binds the sugar and makes the sugar snappy and brittle.

Gum tragacanth must be soaked in cold water, and in adding the water use 2 ounces of gum tragacanth to 1 pint of water and add the water one-half pint at a time, so that the gum tragacanth will absorb the water. Then add the rest

of the water and let stand until dissolved. Then it must be strained through a cloth and pressed out.

In using the gum tragacanth, the dissolved gum, the powder sugar is moistened with this gum, and corn syrup spread out on trays to dry, so that it can be granulated by running through the grinding mill before it can be run through the compressing machine to be pressed into tablets.

Egg albumen is used to make the goods white, and must be soaked in cold water over night in a glass jar. Never soak egg albumen in a tin vessel, as the tin will cause the egg albumen to change its color.

Soak 4 ounces of egg albumen to 1 pint of water for using in compressed tablets. This must be added with the corn syrup or gum solutions to moisten the powder sugar in the mixing machine, then the mixture must be placed out on trays in drying room to dry before being granulated by running through the drug grinding mill.

Powder starch is used to cheapen the tablets and also to make them brittle.

Stearic acid is used to lubricate the mixture so that the mixture does not stick to the punches and dies on the compressing machine. The finer the granulation is, the more stearic acid you will have to use. The coarser the granulation the less stearic acid you will have to use on the compressing machine.

The compressing machine has a capacity of about 700 tablets per minute on the new type compressing machine.

HAND MADE MINT LOZENGES

For the benefit of the readers, I will furnish instructions on hand made mint lozenges.

Soak 1 lb. of gum tragacanth in 1 gallon of water in a crock. Do not use a tin pail for soaking the gum tragacanth in. Then, when soaking the gum tragacanth, add 1 quart of water at a time on the gum so that the gum will ab-

sorb the water slowly. Then, every half hour, add another quart of water until the whole gallon of water is on the gum tragacanth. Then let stand over night. Then, next morning, put the dissolved gum through a cheese cloth. Then twist the cloth so that the dissolved gum is squeezed out through the cloth. Then it is ready to be mixed with the 4 X sugar.

Soak over night 4 ounces of egg albumen in 1 pint of water; then, when it is thoroughly dissolved, strain through a fine sieve.

Now place 5 lbs. of corn syrup into the beating machine with the 1 pint of dissolved egg albumen, and beat the corn syrup up light. Then add the dissolved gum tragacanth and mix thoroughly; then add 10 lbs of powder sugar and mix thoroughly. Now sieve about 50 lbs. of powder sugar on a table, then make a bay into the powder sugar and put the beaten batch of gum and corn syrup into the bay, then mix into a paste like you would mix a batch of dough.

If you have a mixing machine all you have to do is to add the 50 lbs. of powder sugar in the mixer, then flavor the batch with mint and roll out.

Then roll the paste out on a clean table, which must be very smooth, with a rolling pin, and use 2 rulers one-eighth inch thick, the thickness of the lozenges.

To keep the dough from sticking to the table, and also to the rolling pin, use corn starch for dusting. The table that is used for rolling down lozenge dough must be very smooth, and when rolling out each sheet dust the top of the dough with corn starch and rub the top of the sheet with the palm of your hand, which will give it a very smooth surface, which is called facing up. Then roll out from 2 to 3 sheets before starting to cut into lozenges. Then take the first sheet that you rolled out and turn the sheet over, and cut them out with a round lozenge cutter. Then they are placed on trays, and the trays are stacked in a warm room. Then, when dry, they are brushed clean from starch and then packed.

For the No. 2 grade mint lozenges use 5 lbs. of corn starch in the mixture when mixed on the table or in the mixing machine.

POP CORN SPECIALTIES

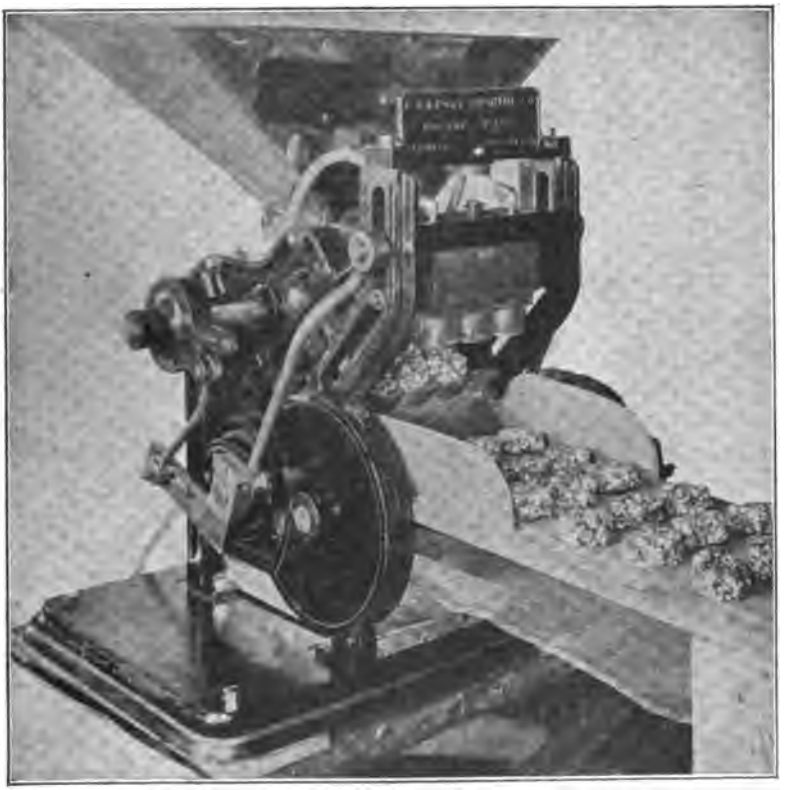
In the manufacture of pop corn specialties you should have the following equipment: Rotary pop corn popper for popping the corn. The revolving can mixing machine for mixing the cooked syrup with the pop corn and peanuts.

The pop corn ball press, or brick press for pressing the pop corn into balls or bricks.

The wrapping machine is used for wrapping and sealing the containers for pop corn package goods.

Place 2 to 3 pounds of pop corn that has been shelled and cleaned into your rotary popper, then start the receiving drum revolving with the gas turned on the revolving drum. Then, as soon as the corn is popped, let it run out in sugar barrels. Then it is ready to be used in the manufacture of pop corn specialties.

Rotary Pop Corn Popper. Thos. Mills Co., Philadelphia, Pa.



Self-filling Corn Cake Machine. E. R. Knott Machine Co., South Boston, Mass.

This machine is used in the manufacture of pop corn cakes or pop corn fritters, which are finding a ready sale with the wholesale and retail manufacturers. When you have installed this self-filling pop corn machine in your plant you are in position to turn out these pop corn specialties on a large scale, as the machine is self-feeding and will make the mixed corn into cakes about as fast as the cooked batches

are ready for the machine. You simply place the freshly mixed corn in the hopper of the machine and the machine lays the finished cakes on the conveyor.

POP CORN CAKES OR FRITTERS

Cook on open gas fire in copper kettle 6 lbs. of sugar, 4 lbs. of corn syrup, 1 quart of water. Cook to 295 degrees. Then add 1 pint of molasses and let cook thoroughly through the batch, or to 285 degrees. You must stir the batch continuously when you add the molasses, to keep the batch from scorching on the bottom of the kettle.

Now place 1 bushel of sifted pop corn in your mixing machine, then pour this cooked syrup on the pop corn in the mixing machine and start mixer going. Then, when the pop corn is thoroughly covered with this cooked syrup, add one-half pint of Nucoline oil, and when thoroughly mixed place in the hopper of the machine on feed rolls, then start machine.

These pop corn cakes or fritters can be made in different colors, as white, pink, orange, molasses and chocolate.

When making these pop corn cakes on a large scale, as wholesale work, cook 60 lbs. of sugar and 40 lbs. of corn syrup with 2 gallons of water. Cook to 225 degrees, then turn off the steam from your steam kettle. Then weigh off about 12 lbs. of this syrup to every bushel of corn in the mixing machine and then cook this amount of syrup in a copper kettle on the open fire to 285 degrees, and in using salt to flavor the batches always add the salt after the batch is cooked and taken from the fire.

By mixing 100 to 200-pound batches in the steam kettle and cooking to 225 degrees, then transferring to the open fire kettles you are in position to turn out this class of work on a large scale and at the same time keep the machine in continuous operation.

When making fine pop corn cakes or fritters the pop

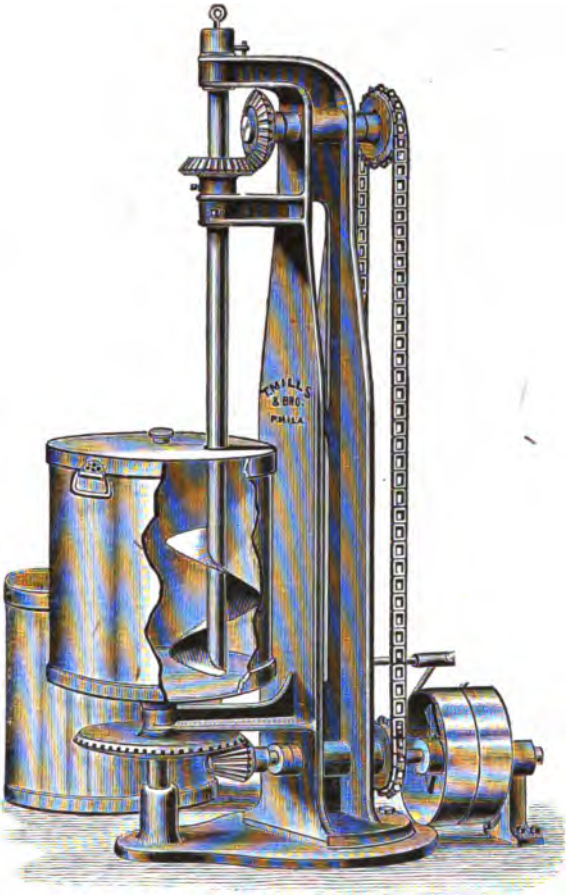
corn must be ground with the pop corn grinder, which can be purchased from the Knott Machine Co., of Boston, Mass.

When making the different colors and flavors for fritters or cakes the color must be added after the batch is cooked and taken from the fire, and the same with flavors, except molasses, which must be cooked in the batch.

POP CORN FLAKES FOR PACKAGES

Cook on open fire in copper kettle 8 lbs. of sugar, 4 lbs. of corn syrup, 1 quart of water. Cook to 300 degrees, then add 1½ pints of molasses, and as soon as you add the molasses stir your batch continuously, so that the batch does not scorch on the bottom of the kettle. Then let the batch cook to 290 degrees for warm weather or 285 degrees for cold weather.

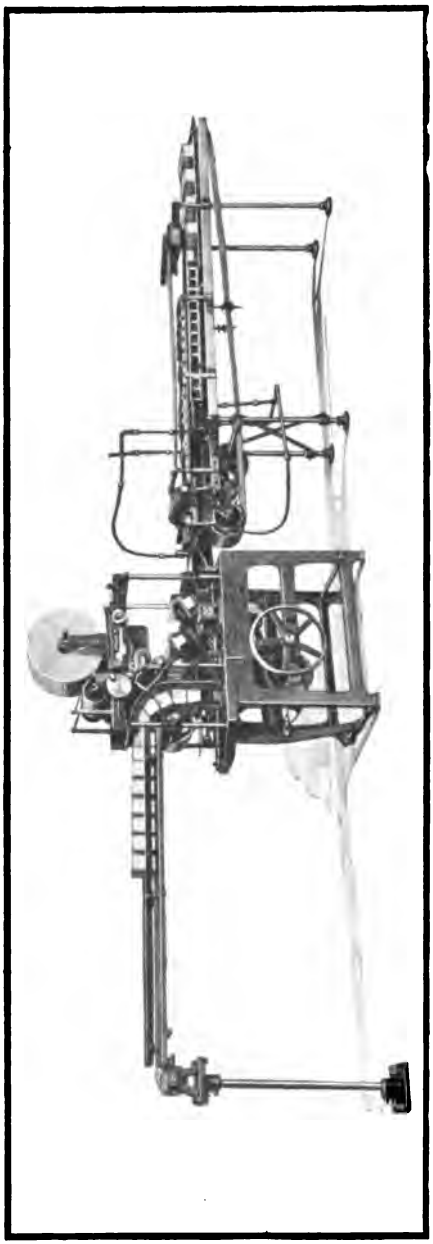
Now place 1 bushel of corn that is popped into the mix-



Revolving Mixing Machine. Thos. Mills Bros, Philadelphia, Pa. . . . .

ing machine. Then pour this cooked molasses batch on the pop corn that is in the mixing machine and start the mixing machine going. Then, when the corn is thoroughly covered with this cooked syrup, add 1½ pints of Nucoline oil, and pour this oil on slowly. Then stop the mixer and pour out

on tables lined with heavy tin with sides on the table; then, if the corn clings together, break apart with a stick. Then, when cold, have girls pack in shell containers; then the containers should be wrapped in wax paper on the wrapping machine, and then, with a printed wrapper where the wrapper is sealed by heat, which keeps out the dampness or air, so that the goods in the package will keep in good condition.



Machine for Wrapping the Cartons in Wax Paper and Printed Wrappers. Package Machinery Co., Springfield, Mass.

Then, after the pop corn is packed in the shells, the shells are wrapped in wax paper and then with the printed wrappers. As the machine wraps the package in the wax paper it is hermetically sealed by heat. The wax paper is fed from the roll. The package to be wrapped is fed from a conveyor and the wrapped packages are discharged upon a conveyor, where the packages are ready to be placed in the container to be shipped out.

POP CORN BALLS WRAPPED

Cook on open fire in copper kettle 10 lbs. of sugar, 6 lbs. of corn syrup, with 1 quart of water. Cook to 240 degrees in warm weather or 238 degrees in cold weather. Now place 1 bushel of corn that has been popped in your mixing machine and add the cooked syrup on pop corn, and only use enough of the cooked syrup so that the corn is sticky; then, for the white, add 2 ounces of vanilla flavor, then pour out on the table and have girls shape them into balls. Then press them in the pop corn ball press. Then wrap in wax paper.

For strawberry pop corn balls add 3 ounces of strawberry flavor and color the syrup a deep pink color before adding on the pop corn in the mixing machine.

Pop Corn Ball Press. Thos. Mills Bros., Pheladelphia, Pa.

This cut represents a ball press for making pop corn balls 3½ inches in diameter and is so arranged that the pop corn ball is pushed out of the cut at each operation..

The pop corn brick machine is made similar to pop corn ball machine, except the cup is arranged to make the pop corn into bricks.

MOLASSES POP CORN BALLS OR BRICKS, WRAPPED

Cook on the open fire in a copper kettle 7 lbs. of sugar,

5 lbs of corn syrup, with 1 quart of water. Cook to 255 degrees, then add 1½ pints of molasses and stir the batch as soon as you add the molasses. Then cook the batch to 240 degrees and add 2 ounces of salt. Then have a bushel of pop corn in the mixing machine and pour the syrup on the corn until the corn is thoroughly covered, then pour out on table or slab that is greased and dusted with flour. Then have the girls shape them, then press by ball press.

PEANUT POP CORN FLAKES

Cook on the open fire in a copper kettle 8 lbs. of sugar, 6 lbs. of corn syrup, with 1 quart of water. Cook to 300 degrees, then add 1½ pints of molasses and stir the batch continuously as soon as you add the molasses, so that the batch will not scorch on the bottom of the kettle.

Now place 1 bushel of pop corn in the mixer with 5 lbs. of roasted Virginia peanuts. Then add the cooked syrup, which is cooked to 290 degrees for hot weather, 285 degrees for cold weather. Then add 1½ pints of Nucoline oil to separate the corn after the cooked syrup is added. Then pour out on a table lined with tin. Let lay until cold, then pack in cartons or shells. Then wrap the shells by wrapping machine in wax paper, then in printed wrappers.

POP CORN FRITTERS

Cook on the open fire in a copper kettle 8 lbs. of sugar, 5 lbs. of corn syrup, with 1 quart of water. Cook to 290 degrees, then add 1 pint of molasses and cook the batch to 285 degrees. Then place 1 bushel of corn in the mixer and add enough of the syrup so that the corn is thoroughly covered and add 2 ounces of salt on the pop corn in the mixer. Then the batch is ready to be pressed into fritters by the fritter press machine.

COCOANUT POP CORN FLAKE

Cook on the open fire in a copper kettle 8 lbs. of sugar, 6 lbs. of corn syrup, with 1 quart of water. Cook to 285 degrees for cold weather. Then add 1 pint of molasses and cook the batch to 285 degrees for cold weather or 290 degrees for warm weather. Then add 2 lbs. of pop corn and 3 lbs. of sliced cocoanut and mix with a paddle in the copper kettle on the open fire with very little heat on the kettle. Then pour out on a greased slab, then spread out into flakes with two table forks.

POP CORN BRITTLE

Cook on the open fire in a copper kettle 5 lbs. of sugar, 3 lbs. of corn syrup, with 1 quart of water. Cook to 270 degrees, then add 1 lb. of ground Spanish peanuts and cook until the peanuts are roasted a very light brown color. Then add 1½ lbs. of ground pop corn and mix thoroughly, then pour out on a greased slab and add 2 ounces of soda and 1 ounce of salt. Then fold up with a batch knife and continue folding the batch until the soda is thoroughly mixed. Then roll down very thin on your spinning board that has the heat turned on the board. Then stretch very thin.

SUGAR POP CORN, WHITE AND PINK

Place 1 bushel of corn in the revolving pan and give the corn a wetting with a solution of dissolved gum arabic syrup and half simple syrup. Then add some vanilla flavor and pour on enough of the syrup to wet the corn, then dry up the charge with granulated sugar.

For pink color sugar pop corn, color the syrup and flavor with strawberry flavor, and give the pop corn a wetting, and dry up the charge with granulated sugar.

PEARLED POP CORN RUN UP IN THE PAN

Syrup to be used in pearling pot for pearling pop corn.

Soak over night 3 lbs. of gum arabic in 1½ quarts of water. Then, next morning, dissolve the gum arabic by placing it in a steam kettle with little heat turned on the kettle. Now cook in the steam kettle, or on the open fire in a copper kettle, 20 lbs. of sugar, with two-thirds gallon of water and cook to 39 degrees on syrup gauge. Now then, take 5 lbs. of this crystal syrup that is cooked to 39 degrees and 1 pint of the dissolved gum arabic and mix together. Then color the syrup with some caramel color and a little red color, then add a little oil of cinnamon flavor. Then it is ready to be put in the pearling pot for pearling the pop corn.

Pearling Pot for Pearling Pop Corn. Thos. Mills Bros., Philadelphia, Pa.

Now then, place 1 bushel of corn in the revolving pan with a little heat turned on the pan, but do not let the pan get too warm. Then pour the syrup mixture into the pearling pot and regulate the discharge by the center pin that is in the center of the pearling pot. Then set the pan so that the syrup will not run in a large stream on the pop corn while the pop corn is revolving in the pan. Then, after the pop corn has been pearled like a burnt peanut, they should be glazed with confectioner's glaze, or by gum arabic glaze.

INSTRUCTIONS ON ICE CREAM WORK

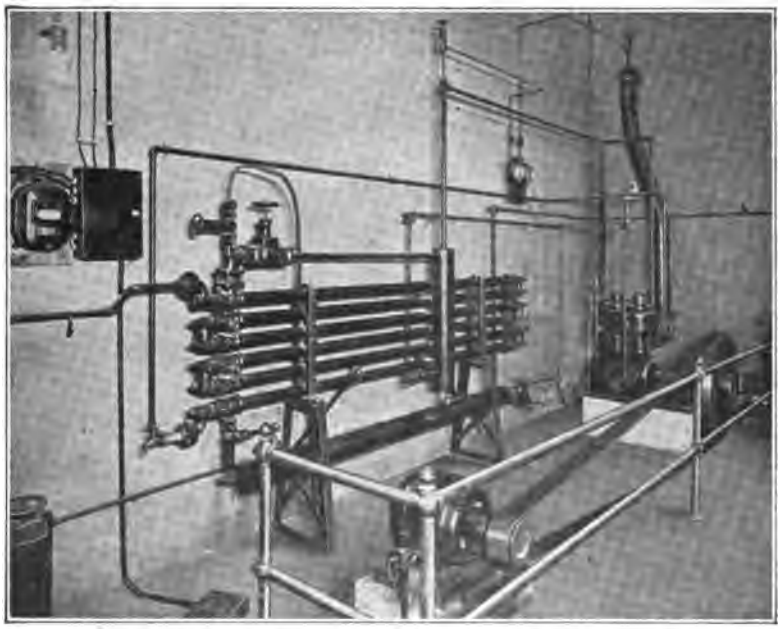
Mechanical refrigeration is a necessity in the up-to-date confectionery ice cream plant. The confectionery and the ice cream industry in the United States has been developing so fast in the last year that up to the present time no ice cream plant or confectionery plant can afford to be without mechanical refrigeration for freezing the ice cream or for cooling the fountain by mechanical refrigeration. In the manufacture of ice cream you must have the following equipment, such as a compressor, brine tank, brine pump, brine ice cream freezer, hardening room for storage room for hardening the cream after it has frozen, ice breaker for crushing ice for packing the tubs if you are making ice cream for commercial use.

Mechanical refrigeration, when properly installed, increases your output, lowers your cost of production, and it is sanitary, economical, and has been found thoroughly reliable with the successful ice cream manufacturers.

Every up-to-date confectioner to date is equipped with mechanical refrigeration for manufacturing his ice cream, as well as cooling the fountain with mechanical refrigeration. They have found it to be more economical and more satisfactory in every way. The trouble and annoyance common to the old method of producing refrigeration with ice and salt, icing up every morning, the drip and dirt from the

melting ice, all of these disappear when you have installed mechanical refrigeration in your plant.

Until recent years the chief objection to installing mechanical refrigeration in the manufacturing confectionery plants has been the initial cost. The initial expense, operating costs and upkeep of a York plant are now at a point where they are easily within reach of all the successful ice cream and confectionery plants.



Showing York Refrigerating System.

IN THE MANUFACTURE OF ICE CREAM

A very important matter in the manufacture of ice cream is the flavor of the cream, and also the condition of the cream before it is made into ice cream. Special attention should be given to its selection and how the cream is handled.

Cream that is to be frozen into ice cream should be pasteurized and should not be uused in the manufacture of ice cream for at least 24 hours after it is pasteurized, and should be placed in the cooling room to age for 24 hours at a temperature just above the freezing point, at about 35 to 40 degrees.

Cream that is used right after being pasteurized will not retain much air, so that when frozen into ice cream the yield is reduced and the body of the ice cream will be coarse.

Cream that has started to turn sour may, under stress, be used by adding some sweet cream and using some bicarbonate of soda, about 1 ounce to 5 gallons of cream.

OVER RUN IN ICE CREAM

The over run of ice cream is due to incorporation of air. This should be incorporated in the form of small air globules, as it is thus retained more firmly and produces smoother ice cream. A reasonable amount of overrun is necessary in order to produce a smooth body and a satisfactory profit.

Over run in ice cream can be increased by the use of fillers, as gelatine dissolved in lukewarm water, and then added to the mixture before freezing. Gum arabic can be used for a filler, and should be dissolved in cold water, if in a powder form.

By using a filler, as gelatine or gum arabic, in ice cream you produce a firmer body to the ice cream as well as increase the mount of finished cream. The principal advantage obtained from the fillers as gelatine and gum, it increases the viscosity of the mix, and also prevents the formation of butter particles during the freezing process, and the fact that gelatine or gum, when used as a filler, since they remain a solid at a high temperature, add strength to the cream films surounding the air particles, and thus insure a body possessing better keeping properties.

HAVE CLEAN UTENSILS

Another important subject in the manufacture of ice cream is sanitation. The plant where ice cream is made should at all times be kept clean. The ice cream freezer should be thoroughly cleaned as soon as it is through freezing for the day, and after standing over night it should be thoroughly cleaned with hot water before starting to freeze the cream for the day's run. The ice cream can should be thoroughly cleaned with hot water, and cans that have become rusty should not be used for putting ice cream in.

THE PROCESS OF FREEZING CREAM

The important thing to keep in mind when freezing ice cream is to have the mixture cooled below 40 degrees before being placed in the brine freezer. If the mixture is cooled to about 40 degrees when placed in the freezer the freezing process will precede the churning process, and consequently the latter will not take place.

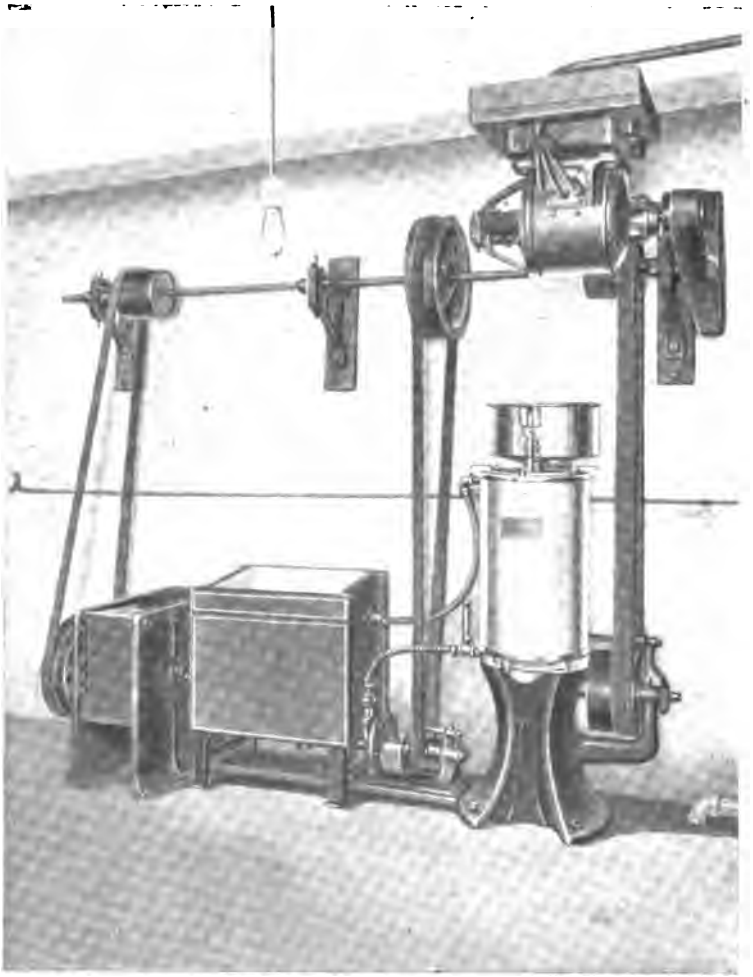
THEORY OF FREEZING CREAM PROPERLY

A freezing mixture is made of ice and salt. The chief cause of freezing is the attraction of salt for water. This causes the ice to melt rapidly and absorbs heat. This heat is abstorbed to a great extent from the cream mixture in the freezing can, and finally the temperature is reduced to below the freezing point.

Cream may be frozen by packing the mixture of ice and salt directly around the freezing can, or by making a brine in a separate receptacle, and then circulate the brine around the freezing can.

When using the brine freezer the mixture of ice and salt must be in the proportion to produce a brine of a proper temperature so that the cream will be frozen in the proper length of time to insure a good quality of ice cream, and a mixture of one part salt to 12 to 14 parts of ice should produce a brine of about 10 degrees F., which will do satisfac-

tory work in the freezer. All brine freezers are provided with a compartment for this purpose, and the brine is circulated by means of the brine pump.



Showing Brine Freezer, Brine Tank and Ice Crusher.

Manufactured by Emery Thompson Machine Co., Bronx, N. Y.

There are two methods for making brine for freezing cream. One is by adding salt to ice in the brine tank, and then this brine is pumped from the brine tank through the freezer; then, after leaving the freezer, it is discharged back over the ice and salt.

The up-to-date method for making a brine for freezing ice cream is by adding chloride of calcium to water in the brine tank, then this brine is cooled by mechanical refrigeration. The brine for freezing should test about 25 to 27 degrees on the Beaume Scale.

To get the best results in the freezer the brine should be between 8 and 10 degrees on the freezer.

Showing a Battery of Ice Cream Freezers with a 200-gallon Cream Mixer. Ice Cream Frozen by Mechanical Refrigeration.

Emery Thompson Veritcal Motor Drive Ice Cream Freezers

USE OF CONDENSED MILK IN ICE CREAM

There seems to be a lack of knowledge on the part of the small ice cream manufacturers as to the advantage of condensed milk for ice cream making. Now, in reference to condensed milk used in the manufacture of ice cream, it does not cheapen in the least the quality of the ice cream. It has been found by experience that a batch of ice cream that contains a proper proportion of condensed milk will prove equally, if not more, satisfactory than with the use of milk and cream combination. As ice cream, when made with the proper proportion of condensed milk, makes a drier cream and is less liable to become grainy and coarse. In using condensed milk for making ice cream the proportion that will give the best results is 1 gallon of condensed milk testing from 7 to 8 per cent butter fat, to 4 gallons of 14 to 16 per cent cream. That is the proportion for a 5-gallon mix, which should produce, with a filler, 9½ to 10 gallons of ice cream when frozen.

Now, in the manufacture of ice cream, use nothing but the best of materials, as good sweet cream, condensed milk with at least 7 per cent of butter fat, and true fruit flavors, and always see that your ice cream will meet the standard, so that it will pass all pure food laws of whatever state you intend to sell your ice cream in. Some states call for 10 per cent ice cream, some call for 12 per cent ice cream, and others call for 14 to 16 per cent ice cream, and any confectioner that caters to the high class trade should use 18 to 20 per cent cream, with a condensed milk that has 8 per cent butter fat.

THE USE OF FRUITS IN ICE CREAM

When using the different fruits use the canned fruit, as you will find from a practical standpoint, it will always give the best results. In using strawberries or raspberries, pineapple, peaches and apricots, take 1 gallon of strawberries or raspberries, and to every gallon add 2 lbs. of sugar and cook

the fruit to a thin jam; then do not add the cooked jam that is thoroughly cold until after your cream starts to freeze in the freezer, and the same with true fruit flavors. The strawberries, raspberries, peaches and apricots should be pressed through a sieve before being cooked with the sugar. With Maraschino cherries or pineapple the juice should be drained from the fruit and then ground through a food chopper, fine.

NUTS USED IN ICE CREAM

Almonds, peanuts and chestnuts should be given a light roast, then ground through a food chopper.

English walnuts, pecans, Brazils, filberts, black walnuts and pistachio nuts should not be roasted when used in ice cream, but they should be ground through a food chopper and one-quarter ounce of salt should be added to every 5 gallon mix that contains nut meats, and the salt and nuts should be added after the batch has started to freeze.

ICE CREAM IS CLASSIFIED IN TWO DIFFERENT METHODS

First by using the raw cream, which is classified by the ice cream trade as Philadelphia ice cream.

The second method, by cooking the cream near the boiling point and then cooling to 40 degrees before freezing, and also the use of eggs. This method is classified by the ice cream trade as the Neapolitan ice cream.

Ice cream is classified according to the United States pure food laws as a frozen product made from cream and sugar, with and without natural flavoring.

Fruit ice cream is classified as a frozen product, made with cream, sugar and fruits.

Nut ice cream is classified as a frozen product, made with cream, sugar and nuts.

INSTRUCTIONS FOR MAKING THE DIFFERENT KINDS OF ICE CREAM

VANILLA ICE CREAM NO. 1

5 Gallons of 20 per cent cream, 7 lbs. of granulated sugar, 4 ounces of gelatine, dissolved in 1½ pints of water; 5 ounces of vanilla flavor.

Place your 5 gallons of cream in a mixing kettle, then add the sugar and mix thoroughly, then add your dissolved gelatine.

To disolve the gelatine, add one-half pint of cold water on the 4 ounces of gelatine, then mix thoroughly, then add the balance 1 pint of warm water and stir until dissolved, then add to the mixture and stir the mixture thoroughly while adding the dissolved gelatine. You can put the 1½ pints of cold water on the gelatine, then heat the gelatine until dissolved, and you must stir the gelatine in the container if placed on the furnace, and do not let the gelatine get hot, only warm enough so that it will dissolve; and you should always have the gelatine dissolved before you are ready to mix up your batch of cream, so that the gelatine mixture will have time to cool some. It must not be added too cool, or it will not mix with the sugar and cream.

Now when your mixture is ready, the brine on the freezer should be at a temperature of 8 to 10 degrees, not any higher than 10 degree,s between 8 and 10 degrees will produce the best results in freezing cream. Then, when the mixture has started to freeze, add the 5 ounces of vanilla flavor. The freezing of the ice cream should be carried on until it acquires a dead appearance.

As long as the cream remains shiny like, the air has not been properly incorporated, as large bodies of the cream containing no air remain, and if freezing is discontinued at this point the yield will be low and the body will be coarse.

Then, when your cream has reached a dead appearance,

open the gate on the freezer and run into your ice cream cans. Then place the full cans of ice cream into the hardening room to ripen up. Ice cream should be left in the hardening room for at least 24 hours, at from 6 to 8 degrees.

Showing Hardening Room for Storing the Ice Cream, and which is kept cold by Mechanical Refrigeration.

The hardening room for storing the ice cream after being frozen should be cooled by direct expansion from the compressor, and should be kept at a temperature of 6 degrees F., which is cold enough for ice cream that is to be used at the fountain.

VANILLA ICE CREAM NO. 2

3½ gallons of 20 per cent cream, 1 gallon of 8 per cent condensed milk, 2 quarts of 4 per cent milk, 7 lbs. of granu-

lated sugar, 4 ounces of gelatine dissolved in 1½ pints of water, 4 ounces of vanilla flavor.

VANILLA ICE CREAM NO. 3

3 gallons of 20 per cent cream, 1 gallon of 8 per cent condensed milk, 1 gallon of 4 per cent milk, 7 lbs. of granulated sugar, 4 ounces of gelatine dissolved in 1½ pints of water, 3 ounces of vanilla flavor.

VANILLA ICE CREAM NO. 4

2½ gallons of 20 per cent cream, 1 gallon of 8 per cent condensed milk, 1½ gallons of 4 per cent milk, 7 lbs. of granulated sugar, 4½ ounces of gelatine dissolved in 1½ pints of water, 3 ounces of vanilla flavor.

VANILLA ICE CREAM MADE WITH POWDER GUM ARABIC

3½ gallons of 20 per cent cream, 1 gallon of 7 per cent condensed milk, 2 quarts of 4 per cent milk, 7 lbs. of granulated sugar, 2 ounces of gelatine, 2 ounces of powder gum arabic, 4 ounces of vanilla flavor.

Soak the powder gum arabic over night in one-half pint of water in a glass jar, then strain through a fine sieve. Dissolve the gelatine in two-thirds pint of water, then add to the mix and thoroughly stir the dissolved gelatine and gum arabic through the mixture. Then freeze with a brine on the freezer at 8 degrees.

VANILLA ICE CREAM COOKED

3½ gallons of 20 per cent cream, one-half gallon of 8 per cent condensed milk, one-half gallon of 4 per cent milk, 2 dozen fresh eggs, 4 ounces of gelatine dissolved in 1 pint of water, 4 ounces of vanilla flavor, 8 lbs of sugar.

Place the 3½ gallons of cream and the 2 quarts of milk in a copper kettle and then cook to 185 degrees by cooking gauge. Do not let the cream come to a boil. Stir the cream

while cooking, so that the cream will not stick to the bottom of the kettle. Then remove from the fire and strain and cool to 40 degrees, then freeze in brine freezer with a brine on the freezer at 8 degrees. Now take the 2 dozen eggs and the 8 lbs. of sugar and the one-half gallon of condensed milk and mix thoroughly, then add your cream and the dissolved gelatine and mix thoroughly; then freeze, and as soon as the cream starts to freeze in the brine freezer add the vanilla flavor.

STRAWBERRY ICE CREAM NO. 1

4 gallons of 20 per cent cream, 1 gallon of 8 per cent condensed milk, 8 lbs. of sugar, 5 lbs of preserved strawberries or 1 gallon of canned strawberries, 2 ounces of true fruit flavor, the juice of two lemons, 4 ounces of gelatine dissolved in 1½ pints of water. Color with carmine color, a pink shade.

STRAWBERRY ICE CREAM NO. 2

4 gallons of 14 per cent cream, 1 gallon of 7 per cent condensed milk, 4 ouunces of gelatine dissolved in 1½ pints of water, 4½ lbs. of strawberry preserves or 1 gallon of canned strawberries, the juice of 2 lemons, 8 lbs. of granulated sugar. Color with carmine color, a strawberry shade.

RASPBERRY ICE CREAM

3½ gallons of 16 per cent cream, 1 gallon of 8 per cent condensed milk, 8 lbs. of granulated sugar, one-half gallon of 4 per cent milk, 4 ounces of gelatine dissolved in 1½ pints of water, the juice of 2 lemons, 4½ lbs. of raspberry preserves or 1 gallon of canned raspberries. Color with carmine color, a raspberry shade.

PEACH ICE CREAM

4 gallons of 16 per cent cream, 1 gallon of 7 per cent

condensed milk, 8 lbs. of sugar, 4 ounces of gelatine dissolved in 1½ pints of water, 1 gallon of canned peaches that are cooked to a preserve, the juice of 2 lemons. Color a light shade of orange color.

CHOCOLATE ICE CREAM

Chocolate syrup for flavoring and coloring chocolate ice cream:

Cook by steam or open fire in a copper kettle 1½ lbs of cocoa powder, 1 quart of water and mix to a paste. Then add 3 lbs. of sugar and 1 gallon of 20 per cent cream and cook to a boil on open fire or by steam kettle. Then strain and cool. When cooking on the open fire stir the batch constantly with a paddle or otherwise your batch will scorch on the bottom of the kettle. Then, when the batch has come to a good boil, set from the fire to cool, then add one-half ounce of powder cinnamon and mix through the batch; then it is ready to be used in the manufacture of chocolate ice cream.

For extra strong chocolate syrup, use 2 lbs. of cocoa powder.

CHOCOLATE ICE CREAM NO. 1

3½ gallons of 20 per cent cream, 1 gallon of 8 per cent condensed milk, 7 lbs. of granulated sugar, 4 ounces of gelatine dissolved in 1½ pints of water, 1 gallon of chocolate syrup (which must be cold before using), 1 ounce of vanilla flavor.

CHOCOLATE ICE CREAM NO. 2

4 gallons of 16 per cent cream, 1 gallon of chocolate syrup, 7 lbs. of granulated sugar, 1 ounce of vanilla flavor, 4 ounces of gelatine dissolved in 1½ pints of water.

CHOCOLATE ICE CREAM NO. 3

3½ gallons of 14 per cent cream, 1 gallon of 8 per cent condensed milk, 7 lbs. of granulated sugar, 1 gallon of

chocolate syrup, 2 ounces of vanilla flavor, 4 ounces of gelatine dissolved in 1½ pints of water.

MAPLE ICE CREAM

Place 5 lbs. of maple sugar that is pounded in small pieces in a copper kettle, then add 1 gallon of 4 per cent milk and place the kettle on a fire and cook auntil the maple sugar is thoroughly dissolved, then take from the fire and strain and cool to 40 degrees. Then it is ready to be used in the mix.

3 gallons of 20 per cent cream, 1 gallon of 8 per cent condensed milk, 2 lbs. of C sugar, or about No. 10 sugar; 4 ounces of gelatine dissolved in 1½ pints of water.

Then add your dissolved maple syrup that is cooled to 40 degrees, 1 ounce of maple flavor.

Burnt sugar color, enough to give the mixture a light maple color.

CARAMEL ICE CREAM

Place 7 lbs. of No. 10 sugar in a copper kettle with 1 quart of water, one-half lb. of corn syrup, and cook this sugar to 310 degrees on cooking gauge, then add 1 gallon of 4 per cent milk or one-half gallon of condensed milk, 7 per cent, and stir your batch as soon as you add the milk, and let boil through. Then take from the fire and cool to 40 degrees. Then it is ready to be used in the mix.

4 gallons of 16 per cent cream, add the caramel syrup that is cooled to 40 degrees, 4 ounces of gelatine dissolved in 1½ pints of water, 2 ounces of vanilla flavor, one-half ounce of salt.

INSTRUCTION FOR MAKING BRICK ICE CREAM

In filling molds, whether they are large or small, fancy pieces or the individual mold, always fill the molds solid with cream, so as to prevent air holes. This can always be accomplished by filling the mold more than full, then press-

ing the covers on tight. Now, when filling the brick molds line the bottom with wax paper, and then place another piece of paper on top and put on the cover, pressing it down well. Then place in the hardening room. It should be left in the hardening room for 5 hours, according to the temperature of hardening room.

In an ice cream plant you should have a brick cutter for cutting the ice cream bricks. The bricks are cut in portions of from 5 to 7 bricks to a quart and then wrapped in wax paper and put in pasteboard boxes and stored in ice cases until wanted.

Many of the different colors and flavors desired in brick molded work are made by using the different combinations of ice cream, as vanilla top, strawberry center and chocolate bottom. Fruits and flowers may be made to look natural by touching them up with colors mixed with a little syrup, and use artificial stems. By dipping the fruit design in cold water after it is painted and then placing in ice case, a thin, transparent crust will form which will help to keep the cream in better condition. Always allow the cream to be thoroughly hardened before removing it from the mold.

SODA FOUNTAIN SYRUPS

Concentrated syrup: Place 4 gallons of water in a copper kettle. Then turn on the steam and heat the water hot. Then add 100 lbs. of cane sugar and mix until dissolved, by stirring. Do not use any heat on the kettle after the sugar is added. Then, after the sugar is thoroughly dissolved, strain your syrup through a cheesecloth strainer and strain your syrup in a tub or kettle, then add one-tenth of 1 per cent of benzoate of soda and dissolve the soda in a little water. Then pour in gallon jugs and seal tight.

CONCENTRATED SYRUP BY PERCOLATION

Place 100 lbs. of cane sugar in the percolator, then add

35 lbs. of water.

CONCENTRATED SYRUPS MADE FOR FOUNTAIN

Strawberry Syrup: Color 1 gallon of concentrated syrup with carmine or a dark red color and flavor with 5 ounces of true fruit strawberry.

Raspberry Syrup: Color one gallon of concentrated syrup with a dark red color and flavor with 5 ounces of true fruit raspberry.

Orange Syrup: Color 1 gallon of concentrated syrup a deep orange color and flavor with 3 ounces of orange extract or emulsion.

Lemon Syrup: Color 1 gallon of concentrated syrup a lemon color and flavor with 3 ounces of lemon extract or emulsion.

Wild Cherry: Color 1 gallon of concentrated syrup a deep red color, brilliant rose color, and flavor with 5 ounces of wild cherry flavor.

Peach Syrup: Color 1 gallon of concentrated syrup a peach color by using yellow and orange and a very little red color, and flavor with 5 ounces of peach flavor.

Pineapple Syrup: Color 1 gallon of concentrated syrup a light yellow and flavor with 5 ounces of pineapple flavor.

Vanilla Syrup: Color 1 gallon of concentrated syrup with burnt sugar color and flavor with 5 ounces of vanilla flavor.

CHOCOLATE CONCENTRATED SYRUP

Melt 5 lbs. of liquor chocolate in steam kettle; then, when your chocolate is melted, add 5 lbs. of corn syrup and thoroughly mix to a paste, then add 5 quarts of concentrated syrup and mix thoroughly, and keep the mixture warm while adding the concentrated syrup. Then add one-tenth of 1 per cent of benzoate of soda, and dissolve the soda in very little water. You can mix 50 gallons as quickly as 1

gallon by using a steam stirring mixing kettle, then pour in wide-mouthed gallon jugs, to be sold to the fountain trade.

CHOCOLATE FOUNTAIN SYRUP FOR CHOCOLATE ICE CREAM SODA. No. 1

Place 5 lbs. of good cocoa powder in a steam stirring kettle with 25 lbs. of granulated sugar, then add 1 gallon of water and mix thoroughly the water, sugar and cocoa to a paste; then turn on the steam on the kettle and add 1 more gallon of water and 1 gallon of milk, then cook thoroughly by letting the batch boil up good in the steam stirring kettle; then turn off the steam on the kettle and test the batch with a syrup gauge. The batch should test 31 degrees when cool. If your batch tests 29 degrees when the steam is turned off let the batch cook to 30 degrees, then cool by having the steam kettle connected up so that you can turn cold water, as well as steam, into the kettle. Then let the batch mix in the kettle until cool, then pour out in gallon jugs or milk cans, and it is ready to be used on the fountain. By adding 2 ounces of vanilla and one-fourth ounce of salt you will have an extra high grade chocolate syrup. Chocolate syrup that contains milk should be kept cool, but does not have to be kept on ice.

CHOCOLATE SYRUP FOR CHOCOLATE ICE CREAM SODA. No. 2

Place 3 lbs. of good cocoa powder made by the Dutch or Swiss process, in a copper kettle, and place on the furnace. Then have 1½ gallons of water heated hot. Now add the warm water a little at a time to the cocoa powder and make a paste. Then add all the water and start to cook the cocoa and water. Then add 15 lbs. of granulated sugar and cook to a good boil. Then take from the fire and add 1 ounce of vanilla flavor and one-fourth ounce of salt. When cool it is ready to be used on the fountain. Do not place hot choco-

late syrup in the ice box or cooling room until it is cool, or otherwise the cocoa will separate from the syrup.

BITTER SWEET SYRUP FOR CHOCOLATE ICE CREAM SUNDAES

Melt 10 lbs. of liquor chocolate in a steam stirring kettle. Then, after the chocolate is thoroughly melted, add 6 lbs of corn syrup and mix thoroughly, then add one-half gallon of warm water and thoroughly mix. Then add 20 lbs. of granulated sugar and 1½ gallons of water and let the batch cook thoroughly up, then turn off the steam and cool. Then it is ready to be used on chocolate sundaes.

BUTTER SCOTCH SYRUP FOR THE FOUNTAIN

Cook on open fire or steam kettle.

Place 10 lbs. of No. 10 sugar in a copper kettle, 1 lb. of maple sugar, with 1 gallon of water, and cook to 226 degrees on cooking gauge, then add 3 ounces of flour dissolved with 1 pint of water, and pour into the cooked syrup, and stir thoroughly with a paddle; then add 2 lbs of good creamery butter and cook the butter through the batch. Then take from the fire and add 10 lbs. of corn syrup and mix thoroughly, then let stand until cool. Then add 3 ounces of salt and 1 ounce of vanilla flavor.

MAPLE SYRUP FOR THE FOUNTAIN

Place 7 lbs. of Vermont maple sugar with 3 lbs. of No 12 sugar and add 1 gallon of water. Cook to 224 degrees on cooking gauge, then take from the fire and add 10 lbs. of corn syrup and mix thoroughly. Then let stand until cold; then it is ready to be used on sundaes.

CARAMEL SYRUP FOR FOUNTAIN

Place 10 lbs. of No. 10 sugar and 10 lbs. of corn syrup in a copper kettle with 1 quart of water and cook to 300

degrees on cooking gauge. Then reduce the heat from the kettle and add 1 gallon of 20 per cent cream and add the cream slowly while stirring the batch with a paddle. Then, as soon as the cream is thoroughly cooked through, take from the fire and let stand until cold. Then, when cold, mix the batch of caramel syrup up thoroughly; then add 2 ounces of vanilla flavor and 1 ounce of salt.

HOT CHOCOLATE SYRUP FOR FOUNTAIN

Hot chocolate is one of the most leading and important drinks served during cold weather months to the fountain trade, and was originally introduced to take the place of the cold chocolate drink, which is a favorite drink for the hot weather months. Women always prefer a chocolate drink to most any other fountain drink served, and the confectioner who is capable of offering a high grade chocolate drink to his customers it will not take long before he has earned a reputation for his superior chocolate drinks which he is serving at his fountain.

When you have once introduced these up-to-date formulas for hot chocolate drinks in your locality you have thereby established your hot chocolate trade, for when once tried they are favorably remembered by their delicious chocolate flavor.

In selecting a cocoa for your hot and cold chocolate syrups you will find the cocoa, when made by the Swiss or Dutch process, will produce the best hot chocolate, as they seem to contain a greater proportion of cocoa butter than the cheaper grades of cocoa sold on the market.

In dispensing hot chocolate, special urns are a necessity, which can be purchased from the different manufacturers.

In serving hot chocolate you should never add hot water to a cold syrup and expect to serve the customer a hot drink. Hot chocolate should be served hot, not lukewarm; and by using the chocolate syrup as a base and placed in the choco-

late urn, you can always serve the customer a hot drink.

Whipped cream should be used for topping off all hot chocolate drinks, and when serving a cup of hot chocolate, serve the hot chocolate in a cup with a saucer and at least 2 small wafers or crackers with every cup of hot chocolate.

When chocolate syrup has started to turn or ferment, do not try to patch it up by using soda, it will always be noticed, regardless of what you have done to it.

HOT CHOCOLATE SYRUP NO. 1

4 lbs. of cocoa powder, 8 lbs. of granulated sugar, 1 gallon of 16 per cent cream, 1 gallon of 4 per cent milk, 1 ounce of vanilla flavor, one-fourth ounce of powder cinnamon one-fourth ounce of salt.

Cook by steam or open fire. Place the cocoa powder and sugar in a copper kettle, then add the milk slowly and mix to a paste. Then start to cook the batch and add the cream. If cooking on the open fire stir your batch continuously, or otherwise the batch will scorch on the bottom of the kettle. Then let the batch boil up thoroughly, then take from the fire and let stand in the kettle to cool, then add the powder cinnamon and the salt and the vaniilla flavor.

CHOCOLATE SYRUP TO BE USED FOR FINISH HOT CHOCOLATE

Place 1 gallon of chocolate syrup in the chocolate urn with a mixer on the chocolate urn, then add 2 gallons of hot water to the gallon of chocolate syrup, for extra strong hot chocolate; then, when serving, top off with whipped cream.

HOT CHOCOLATE SYRUP NO. 2

4 lbs. of cocoa powder, 8 lbs. of granulated sugar, 2 quarts of 20 per cent cream, 1½ gallons of milk, 4 eggs, 1

ounce of vanilla, one-quarter ounce of powder cinnamon, one-quarter ounce of salt.

Cook by steam kettle or by open fire. Place the cocoa powder and sugar in a copper kettle, then add the milk slowly and mix to a paste. Add the eggs. Then start to cook the batch and add the cream. If cooking by open fire, stir the batch continuously until the batch comes to a good boil. Then take from the fire and add the vanilla flavor, salt and powder cinnamon. Let stand until cool, then the syrup is ready to be made into hot chocolate.

FINISHED HOT CHOCOLATE

Place 1½ gallons of hot water in the chocolate urn, then add 1 gallon of chocolate syrup and mix thoroughly in the urn, then serve and top with whipped cream.

HOT CHOCOLATE SYRUP NO. 3

4 lbs. of cocoa powder, 8 lbs. of granulated sugar, 1 quart of 20 per cent cream, 1 gallon of 4 per cent milk, 1 pint of water, 1 lb. of milk chocolate, 1 ounce of vanilla flavor, one-quarter ounce of powder cinnamon.

Place the cocoa powder and sugar in a copper kettle, then add the milk slowly and mix to a paste. Then add the cream and water, and let the batch boil up thoroughly, then add the milk chocolate that has been melted, and mix thoroughly. Then add the vanilla and cinnamon.

TO FINISH HOT CHOCOLATE

Use 1 gallon of chocolate syrup to 2 gallons of hot water in the chocolate urn and mix thoroughly; then, when serving, top with whipped cream.

HOT CHOCOLATE SYRUP NO. 4

4 lbs. of cocoa powder, 8 lbs. of granulated sugar, 2 gallons of milk, 1 ounce of vanilla flavor, one-quarter ounce of salt, one-quarter ounce of powder cinnamon.

Place sugar and cocoa in a copper kettle, then add one-half gallon of milk and mix to a paste. Then start to cook the batch and add the balance of the milk and let boil up thoroughly. Then add the vanilla and cinnamon and take from the fire. It is then ready to be used.

FOR FINISH HOT CHOCOLATE

Use 1 gallon of chocolate syrup to 1 gallon of hot water and mix thoroughly in the chocolate urn. Then, when serving, top with whipped cream, or marshmallow used for topping.

SARSAPARILLA SYRUP NO. 1

Take 1 lb. of sassafras bark with two-thirds gallon of water and place in a copper kettle and cook down to 1 quart of juice. Then strain the juice through a cheese cloth. Then add 3 lbs. of granulated sugar and stir until thoroughly dissolved, then add, when cold, 1 ounce of oil of wintergreen, and add enough burnt sugar color to give the syrup a light caramel color. Then add 1 pint of this sassafras syrup to 1 gallon of concentrated syrup.

SARSAPARILLA SYRUP NO. 2

Add to 1 gallon of concentrated syrup, 1 ounce of oil of wintergreen, one-half ounce of oil of sassafras, one-quarter ounce of oil of cinnamon, one-quarter ounce of oil of anise.

Mix thoroughly, then add enough caramel color to give the syrup a light caramel color.

NECTAR SYRUP

Mix together 2 quarts of pineapple syrup, 2 quarts of strawberry syrup, 2 quarts of vanilla syrup. Color a red color with carmine.

CITRIC ACID SOLUTION TO BE USED FOR THE FRUIT FLAVORS

Dissolve 2 lbs. of citric acid in 1 quart of hot water. Then strain through a cloth.

Citric acid solution should be used in strawberry syrup, raspberry syrup, pineapple syrup, grape syrup, peach syrup, apricot syrup, lemon syrup, orange syrup, cherry syrup and lime syrup.

Use 1 ounce of citric acid solution to 1 gallon of concentrated fruit flavored syrup.

SODA FOAM TO BE USED FOR SYRUP FOR THE FOUNTAIN

Dissolve 1 lb. of gum arabic in 1½ quarts of water. Soak the gum arabic over night, then heat until thoroughly dissolved. When used for a soda foam use 4 ounces of dissolved gum arabic to 1 gallon of syrup.

MARSHMALLOW FOR FOUNTAIN FOR THE LARGE CONFECTIONER

Soak over night 6 ounces of egg albumen in 1 pint of water. Cook by steam kettle or open fire.

Place 6 lbs. of sugar, 6 lbs. of corn syrup with 1 quart of water in a copper kettle, then cook to 220 degrees.

While the batch is cooking place in marshmallow beater 2 lbs. of special fondant, with the dissolved egg albumen, and beat up very light. Then add the cooked sugar and corn syrup and beat up very light. Then add 1 ounce of vanilla flavor.

Put in 5-gallon cans and it is ready to serve at the fountain for topping hot chocolate or sundaes.

WHIPPED CREAM FOR THE FOUNTAIN

Whipped cream has always been the leading topping used at the fountain for topping hot chocolate or sundaes.

The principal secret of getting a good whipped cream is by having the right kind of machine for whipping the cream and by having the cream thoroughly cold before placing the cream in the whipper or beating machine. Use only sweet cream of at least 25 to 30 per cent for serving to the high-class trade. This percentage of cream will stand up, as it never pays to serve a whipped cream that will not stand up for at least 2 or 3 hours.

The most reliable method for chilling the cream that is to be used for whipping is to place 1 pint of cream in crushed ice and let stand over night, or for 3 hours before using, as the cream should be about 35 degrees, and by having 5 to 8 bottles of cream setting in crushed ice you are always in position to keep a supply of whipped cream on hand for the fountain.

Cream Whipper. Hobart Mfg. Co., Troy, Ohio.

Place 1 pint of cream in the bowl on the machine, that is cooled to about 35 degrees. Then start the machine going, and after your cream is whipped up, add 2 ounces of powder sugar and finish beating very light. Then place in the glass bowl used for whipped cream.

MARSHMALLOW USED FOR TOPPING SUNDAES OR HOT CHOCOLATE

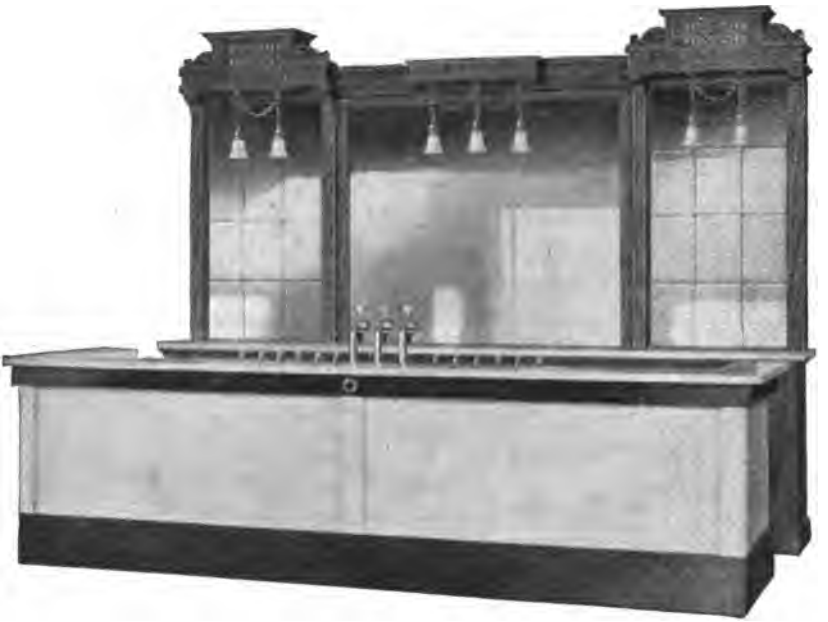
Instead of buying your marshmallow used for topping, with the Hobart cream whipping machine you are in position to make your own marshmallow to be used for topping sundaes or chocolate, and it can be made in a very few minutes.

To turn out a high grade marshmallow for topping, all you need is a small copper kettle, and the syrup can be cooked in the kettle on a gas plate.

To make a first-class topping, use egg albumen in place of whites of eggs, as the egg albumen will give the marshmallow a better body, and will keep better.

Soak 2 ounces of egg albumen in 7 ounces of cold water over night, in a glass jar. Never use a tin container for soaking the egg albumen. Now place 1 lb. of corn syrup in the bowl of the beater with the dissolved egg albumen and start to beat on second speed, then beat this corn syrup and egg up very stiff on fast speed. Now, while this corn syrup is beating, cook in a small copper kettle 2 lbs. of granulated sugar, 1 lb. of corn syrup, with 1 pint of water. Cook to 218 degrees in cold weather or 220 degrees in warm weather by cooking gauge. Then place the machine on second speed and add the cooked syrup in a fine stream. Do not stop the beater while adding the cooked syrup. Then finish beating the batch very light to a sponge, then add one-half ounce of vanilla flavor. Then it is ready to be used for topping sundaes or hot chocolate.

COOLING THE FOUNTAIN BY MECHANICAL REFRIGERATION



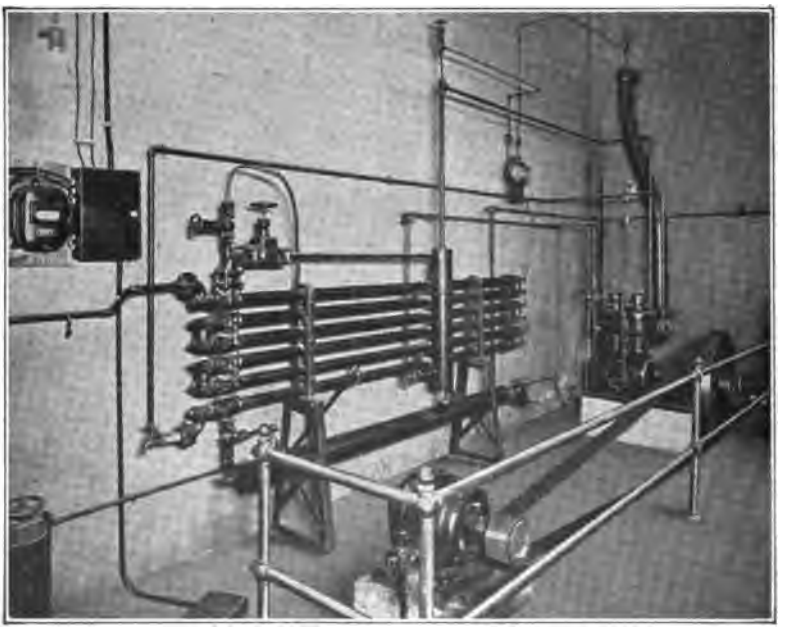
Fountain Cooled by Mechanical Refrigeration.
.. The Bishop & Babcock Co., Cleveland, O.

Every large confectioner in the country today is equipped with mechanical refrigeration for cooling the soda fountain. The ice cream and soda water industry in the United States has been developing so fast in the last year that up to the present time no confectioner who caters to the high-class trade can afford to be without mechanical refrigeration for cooling the fountain. Mechanical refrigeration, when properly installed increases your output at the fountain as well as lowers the cost of production, and it is sanitary and has been found thoroughly reliable with all the successful confectioners.

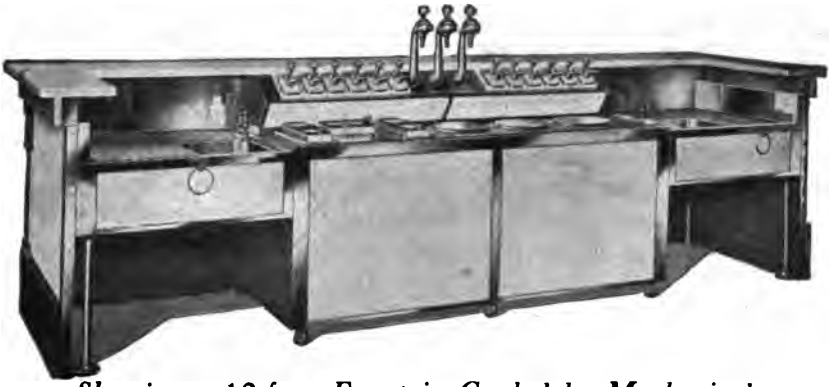
The trouble and annoyance common to the old method

of cooling the soda fountain with ice, and icing up every morning, the drip and dirt from the melting ice, all of these disappear when you have installed mechanical refrigeration for cooling the soda fountain.

The following equipment used for cooling the soda fountain is the compressor, brine tank and brine pump. This brine pump is used for circulating the cold brine through the coils in the fountain, and the brine should be cooled down to about 12 degrees F. If you carry a lower brine in the tank you will freeze all the pipes in the fountain, which will have to be thawed out so that they do not burst.



Showing a York Refrigeration System for Cooling the Fountain.



Showing a 12-foot Fountain Cooled by Mechanical Refrigeration.. The Bishop & Babcock Co., Cleveland, Ohio.

ICE CREAM SODA

How to serve ice cream in a glass of carbonated water:

When an ice cream soda is properly served the syrup and the carbonated water should be thoroughly mixed, so that the customer does not find himself drinking plain soda at first and then plain syrup at last. An ice cream soda must be unified in such a way that the ice cream is left in a lump, and not half mixed into the soda. There are several methods used in dispensing a glass of ice cream soda which are good and practical. One method is by using a 10 or 12 ounce glass and into it draw your syrup. Use 1½ ounces of syrup. When catering to the high-class trade serve 2 ounces of syrup. Into this syrup drop your portion of ice cream, using a scoop that measures 20 portions to a quart. This is the usual quantity. After dropping the portion of ice cream into the glass containing the syrup take your soda spoon and press the ice cream to one side of the glass, so as to allow the syrup to come into view. Doing this will properly mix the drink. Then take the glass in the left hand and with the right hand turn on the carbonated soda

water, using the coarse stream first, allowing it to strike the glass at a point just above and on one side, where the syrup is. When you have filled about half the space in this manner, shut off the coarse stream and turn on the fine, allowing it to strike on the other side of the glass, just behind the cream. By doing this you will mix the syrup and soda water thoroughly without cutting up the ice cream. Then add the coarse stream to nearly fill the glass, and then turn the fine stream to mix and fill. By following this method after a little practice you will be able to mix an ice cream soda both rapidly and well.

CHOCOLATE ICE CREAM SODA

Place in a ten-ounce glass 2 ounces of chocolate syrup, then add a 20-to-a-quart disher of chocolate ice cream. Then follow instructions for ice cream soda.

STRAWBERRY ICE CREAM SODA

Place in a ten-ounce glass 1 ounce of strawberry syrup and 1 ounce of crushed strawberries, then add add a 20-to-a quart disher of strawberry ice cream. Then follow instructions for ice cream soda.

VANILLA ICE CREAM SODA

Place in a ten-ounce glass 2 ounces of concentrated vanilla syrup. Then add a 16-to-a-quart disher of vanilla ice cream, Then follow instructions for ice cream soda.

MAPLE ICE CREAM SODA

Place in a ten-ounce glass 2 ounces of concentrated maple syrup. Then add a 16-to-a-quart disher of maple cream. Then follow instructions for ice cream soda.

PINEAPPLE ICE CREAM SODA

Place in a ten-ounce glass a small ladle of crushed pine-

apple fruit, about 1½ ounces. Then add a 20-to-a-quart disher of vanilla ice cream. Then follow instructions for ice cream soda.

CARAMEL ICE CREAM SODA

Place in a ten-ounce glass 2 ounces of caramel syrup and use a small ladle for measuring the caramel syrup, as the caramel syrup is too heavy to pump from the syrup containers. Then add a 20-to-a-quart disher of caramel ice cream.

NECTAR ICE CREAM SODA

Place in a ten-ounce glass 2 ounces of nectar syrup. Then add a 20-to-a-quart disher of vanilla ice cream. Then follow instructions for ice cream soda.

WATER ICES OR SHERBETS

Water ices are made by adding water to sugar and fruit juices or crushed fruits and then frozen the same as for freezing ice cream. Gelatine, when added to water ices will make your ices, when frozen, have a light and smooth body, also a finer grain to the frozen sherbet. Water ices, when frozen too fast, will be coarse when it comes from the hardening room.

In freezing with the brine freezer, have the brine on the freezer from 12 to 14 degrees.

Sherbets are made by adding water, milk or cream with fruit, and can be made with and without the whites of eggs. Gelatine, when added to sherbets, will make the sherbets have a finer grain and be light and smooth.

STRAWBERRY SHERBET

5 quarts of crushed strawberries pressed through a sieve, 16 lbs. of granulated sugar, 24 lbs. of water, 3½ ounces of gelatine, 1 quart of 20 per cent cream.

Soak the gelatine in 1 quart of cold water for 30 minutes,

then add 1 quart of hot water and thoroughly dissolve the gelatine. Then add the crushed strawberries to your sugar and mix well, then add the water and mix thoroughly, then add the cream. Then strain through a sieve and color with carmine color a light red color. Then freeze in brine freezer with the temperature of the brine in the freezer at 12 degrees. Then place in hardening room to get hard, then serve in sherbet glasses with a spoon and top with a Maraschino cherry.

PINEAPPLE SHERBET

5 quarts of grated pineapple, 16 lbs. of sugar, 2 gallons of water, 1 gallon of 4 per cent milk, 3 ounces of gelatine, 6 eggs (the whites only) beaten very light, 5 lemons (the juice only), yellow color a light shade.

Soak the gelatine in 1 quart of water for 30 minutes, then add 1 quart of hot water and thoroughly dissolve the gelatine. Then add the grated pineapple to the sugar and mix, then add the eggs and water, and last the milk. Then, when the sherbet starts to freeze, add the lemon juice. Then freeze in brine freezer with the temperature of the brine at 12 degrees. Then place in the hardening room to get hard. Then serve in a sherbet glass with a spoon and top with a large Maraschino cherry.

PEACH SHERBET

5 quarts of crushed peach pulp pressed through a sieve, 16 lbs. of sugar, 2 gallons of water, 1 gallon of 4 per cent milk, 3 ounces of gelatine, 4 lemons, the juice only. Orange and yellow color mixed, just enough to make a peach shade.

Soak the gelatine in 1 quart of water for 30 minutes, then add 1 quart of hot water, then thoroughly dissolve the gelatine. Then add the crushed peach pulp with the sugar, then add the lemon juice and the water and mink, and use just enough of the lemon and orange color to make the sherbet

a light peach shade. Then serve in a sherbet glass with a spoon and top with a Maraschino cherry. In topping sherbets with Maraschino cherries, press a toothpick through the center of the cherry, then press the cherry and toothpick in the sherbet. That will keep the cherry from sliding from the top of the sherbet, which will make it look very attractive.

GRAPE SHERBET

5 quarts of grape juice, 16 lbs. of sugar, 2½ gallons of water, 3½ ounces of gelatine, 4 lemons (the juice only), 2 oranges (the juice only), 2 ounces of egg albumen dissolved in 10 ounces of water over night, 8 ounces of powder sugar. Lavender color, just enough to give the sherbet a light violet shade.

In using egg albumen in sherbets in place of egg whites, soak the egg albumen in water over night, then strain and whip up with powder sugar.

You can use the Hobart cream whipper for beating the egg albumen used in sherbets.

Soak over night 2 ounces of egg albumen in 10 ounces of water. Then, next morning, stir the egg albumen thoroughly, then strain. Then place in Hobart cream whipper and add 8 ounces of powder 4 X sugar and beat up very light, then add to your sherbet when ready to freeze.

You will find by using egg albumen in place of whites of eggs in sherbets and when beaten up by machine, that all your sherbets will have a better body than when made by the use of egg whites.

ORANGE SHERBET

2½ dozen oranges, 5 lemons (the juice only), 16 lbs. of sugar, 24 lbs. of water, 2½ ounces of egg albumen dissolved in 14 ounces of water, 10 ounces of powder 4 X sugar, 3 ounces of powder gelatine. Orange color.

Soak the egg albumen over night, then strain and beat up very light with the 10 ounces of powder sugar in beating machine. Grate 1 dozen oranges, then peel the rest of the oranges and grind up through a food chopper. Dissolve the gelatine in 1 quart of warm water, then add water to the sugar, then the fruit, then the beaten egg albumen and the orange color. Then thoroughly dissolve the sugar and freeze.

LEMON SHERBET

2½ dozen lemons, 16 lbs of sugar, 24 lbs of water, 2 ounces of egg albumen dissolved in 12 ounces of water, 3 ounces of gelatine, 8 ounces of powder sugar. Yellow color, enough to make a lemon shade color.

Soak the egg albumen over night, then strain and add the powder sugar and beat in machine very light. Soak the gelatine in 1 quart of water for 30 minutes, then add 1 quart of hot water and thoroughly dissolve the gelatine. Take the balance of the water and dissolve the sugar, then add the dissolved gelatine and the grated rinds of 1 dozen lemons, then the lemon juice, and mix thoroughly. Then add the egg albumen that has been beaten up very light with the powder sugar. Then color the mixture a light lemon shade, then freeze with a brine on the freezer at 12 degrees. Serve in a sherbet glass with a spoon, and top with a Maraschino cherry.

CHERRY SHERBET

1 gallon of Maraschino cherries that are drained from juice, 16 lbs. of sugar, 24 lbs. of water, 3½ ounces of gelatine, 2 ounces of egg albumen soaked over night in 10 ounces of water, 4 lemons (the juice only), 8 ounces of powder sugar.

Grind the Maraschino cherries through a food chopper, then add the cherries to the sugar. Soak the gelatine in 1

quart of water for 30 minutes, then add 1 quart of hot water and thoroughly dissolve the gelatine, then add the balance of the water to the sugar and cherries. Beat up the egg albumen with the powder sugar very light in the machine, then add to mixture and mix thoroughly, then add the lemon juice and freeze. When serving, top with a whole Maraschino cherry.

ICE CREAM SUNDAES

The ice cream sundae is recognized as one of the most leading specialties served at the fountain, and will continue to be recognized as a leader at the fountain for some time to come.

In serving ice cream sundaes a small glass cup is used for the ordinary ice cream sundae. For the fancy dish use the footed glass sundae dishes, which can be purchased at any supply house. When serving a sundae always serve your dish on a serving tray that also contains a glass of water and a small silver sundae spoon. When serving fancy dishes where bon bons or wafers are served with the sundae, always serve them on a small dish. In regard to paper napkins, they can be placed on the tables or served on your tray with the ice cream sundae.

STRAWBERRY SUNDAE

In a sundae glass place a ten-to-a-quart cone of strawberry ice cream. Then, over your ice cream, pour a ladle full of crushed strawberries, then on top of this crushed fruit a spoonful of whipped cream, then serve with 2 small wafers

STRAWBERRY SUNDAE

In a sundae glass place a ten-to-a-quart cone of vanilla ice cream. Then, over your ice cream, pour a ladle full of crushed strawberries and top with a Maraschino cherry.

RASPBERRY SUNDAE

In a sundae glass place a ten-to-a-quart cone of vanilla ice cream. Then over the ice cream pour a ladle full of crushed raspberry fruit, then top with a spoonful of whipped cream. Then place a Maraschino cherry on top.

BANANA SUNDAE

In a sundae glass place a ten-to-a-quart cone of vanilla ice cream. Then pour over the ice cream a ladle full of strawberry concentrated syrup, then decorate with a few slices of banana, then top with a Maraschino cherry and serve with two wafers.

BANANA SPLIT SUNDAE

Serve on a dish, then take and split a banana in half lengthwise, then place over your banana halves a small proportion of vanilla ice cream and a small proportion of strawberry ice cream. Then pour over the ice cream a spoonful of banana concentrated syrup and top with a Maraschino cherry.

CHOCOLATE SUNDAE

In a sundae glass place a ten-to-a-quart cone of caramel ice cream. Then pour over the vanilla ice cream a small ladle full of chocolate concentrated syrup. Then top with a spoonful of whipped cream.

CARAMEL SUNDAE

In a sundae glass place a ten-to-a-quart cone of caramel ice cream. Then pour over the ice cream a ladle full of caramel syrup. Then top with some ground roasted almonds.

FRUIT SUNDAE

In a sundae glass place a ten-to-a-quart cone of vanilla

ice cream. Then pour over the ice cream a small ladle of crushed strawberries and pineapple fruit. Then top with whipped cream and a Maraschino cherry.

NOUGAT SUNDAE

In a sundae glass place a ten-to-a-quart cone of vanilla ice crem. Then pour over the ice cream a small ladle of ground Maraschino cherries. Then top with chopped or crushed roasted almonds and pineapple pieces or grated pineapple.

PINEAPPLE SUNDAE

In a sundae glass place a ten-to-a-quart cone of vanilla ice cream, then pour over the ice cream a ladle full of grated pineapple. Then top with a Maraschino cherry.

HALF AND HALF SUNDAE

Take a ten-to-a-quart cone of vanilla ice cream and divide it into two parts by cutting it with a knife. Then take a ten-to-a-quart cone of strawberry ice cream and divide it into two parts. Then take one part ofthe vanilla ice cream and one part of the strawberry ice cream and place the two sections together. Then pour over the cone of ice cream a small ladle of strawberry concentrated syrup. Then top with a Maraschino cherry.

MARSHMALLOW SUNDAE

In a sundae glass place a ten-to-a-quart cone of vanilla ice cream. Over this pour a ladle ful of strawberry syrup. Then top with a ladle full of marshmallow, then top with a Maraschino cherry,

CANTALOUPE SUNDAE

In serving cantaloupe for a sundae always keep your cantaloupe chilled, and use the small size cantaloupe. Then

cut the cantaloupe in two parts. Then serve a half cantaloupe and use a ten or twelve-to-a-quart cone of vanilla ice cream in the center of the cantaloupe. Then pour over the ice cream a small ladl eof strawberry syrup. Always serve the cantaloupe on a dish and serve with a spoon.

OPERA SUNDAE

On a sundae dish place 3 cones of 20-to-a-quart of vanilla ice cream. Then pour on each cone of ice cream one cone of ice cream topped with crushed strawberries, one cone topped with chocolate syrup and the other cone with grated pineapple and top with Maraschino cherry on the cone with the pineapple fruit. Serve with 2 small wafers.

CUPID DELIGHT SUNDAE

Serve this dish on a fancy dish or platter, then cut two slices of brick ice cream and place on the dish. Then over one of the slices pour a ladle full of grated pineapple fruit and over the other slice a ladle full of crushed strawberry fruit. Then place 3 small pineapple cubes on the pineapple slice and in the center place a white Maraschino cherry. On the strawberry slice place three Maraschino cherries in a circle. Then serve with 2 small wafers.

PEACHES AND CREAM SUNDAE

In a sundae glass place a ten-to-a-quart cone of vanilla ice cream. Then pour over the ice cream a ladle full of crushed peaches, then top with a spoonful of whipped cream and top with a white Maraschino cherry.

CHERRY SPECIAL SUNDAE

Place in a sundae glass a ten-to-a-quart cone of vanilla ice cream. Then pour a small ladle full of ground Maraschino cherries on top of the ice cream. Then top with a spoonful of whipped cream and serve with a spoon and two sugar wafers.

ORIENTAL SUNDAE

Serve in a sundae glass. Then place a ten-to-a-quart of vanilla ice cream in the glass. Then pour a ladle full of crushed pineapple, then sprinkle some chopped roasted almonds, then top with a large Maraschino cherry. Serve with two sugar wafers.

EASTER SUNDAE

Serve this sundae on a fancy dish. Then place your ice cream molded in an egg shape. Then place a ladle full of whipped cream around the egg-shaped mold of ice cream. Then top the ice cream with two white Maraschino cherries. Then serve with sugar wafers.

STRAWBERRY SHORT CAKE SUNDAE

Serve on a fancy dish and use brick ice cream to cut the slices of cream from. Then take and cut two slices of vanilla ice cream, then have some fresh strawberries that you have had in a seavy syrup, then place a slice of vanilla ice cream on the dish, then take a ladle full of crushed strawberries and put on top of the vanilla ice cream, then place the other slice on top of the crushed strawberries. Then decorate with 3 whole strawberries and a spoonful of whipped cream. Then serve with a spoon and also with two sugar wafers.

RASPBERRY DAINTY SUNDAE

Place in a sundae glass a ten-to-a-quart cone of vanilla ice cream. Then pour over the vanilla ice cream a ladle full of crushed red raspberries, then a spoonful of marshmallow topping and top with a Maraschino cherry. Then serve with sugar wafers.

DEMALAY SUNDAE

Place a ten-to-a-quart cone of vanilla ice cream in a

footed sundae glass, then pour over the ice cream a ladle full of crushed strawberries, then sprinkle some chopped walnuts over the strawberry fruit, then top with a spoonful of whipped cream and top with a cherry. Serve with a spoon and sugar wafers.

WALNUT EXCELO SUNDAE

Place in a sundae glass a ten-to-a-quart cone of vanilla ice cream. Then pour over the ice cream a ladle full of maple syrup. Then sprinkle chopped walnuts over the syrup, then top with a walnut half.

ORANGE MARMALADE SUNDAE

Place a ten-to-a-quart cone of vanilla ice cream in a sundae glass. Then pour over the ice cream a heavy orange syrup colored a blood orange color. Then decorate with 3 thin slices of orange.

MILK CHOCOLATE SUNDAE

Place a ten-to-a-quart cone of vanilla ice cream in a sundae glass. Then pour over the ice cream a ladle full of milk chocolate. Then sprinkle chopped roasted almonds on top, then serve with a spoon and sugar wafers.

COLLEGE GIRL SUNDAE

Serve on a fancy sundae dish, then use a twenty-to-a-quart cone of vanilla ice cream and place 3 cones on the dish, then pour over the 3 cones vanilla ice cream. On one pour a pineapple syrup, on one pour strawberry syrup and on the other pour a chocolate syrup, then top with whipped cream and top with a Maraschino cherry. Serve with a spoon and sugar wafers.

CONEY ISLAND SUNDAE

Place a ten-to-a-quart cone of vanilla ice cream in a sundae

glass. Then pour over the ice cream a ladle full of grated pineapple. Then decorate with 3 pineapple cubes and top with a Maraschino cherry.

MAPLE NUT SUNDAE

Place a ten-to-a-quart cone of maple ice cream in a sundae glass. Then pour over the cone of ice cream a ladle full of maple syrup, then sprinkle some chopped walnuts over the syrup and top with a blanched almond. Then serve with a spoon and sugar wafers.

PISTACHIO NUT SUNDAE

Place a ten-to-a-quart cone of vanilla ice cream in a sundae glass. Then pour a ladle full of concentrated vanilla syrup over the ice cream. Then sprinkle with some chopped Pistachio nuts and top with a whole nut. Serve with a spoon and wafers.

AFTERNOON SUNDAE

Place a ten-to-a-quart cone of vanilla ice cream in a sundae glass. Then pour over the ice cream a spoonful of crushed pineapple on one side of the cream. Then pour over a spoonful of crushed strawberries on the other side of the cone of ice cream. Then top with a whole Maraschino cherry.

FIG SUNDAE

Place t ten-to-a-quart cone of vanilla ice cream in a sundae glass. Then pour over the ice cream a ladle of chopped figs made in a concentrated syrup. Then top with a Maraschino cherry.

CHOP SUEY SUNDAE

Place a ten-to-a-quart cone of vanilla ice cream in a sundae glass. Then have a syrup made with chopped almonds,

walnuts, dates, figs and ground Maraschino cherries. Then pour a ladle full of this shop suey mixture over the ice cream. Then sprinkle with some shredded cocoanut over the top. Then serve with a spoon and two sugar wafers.

PARIS SUNDAE

Serve on a fancy dish and use brick ice cream that is made in two colors—vanilla and strawberry flavors—then cut from the brick of ice cream a slice that will run about ten to the quart, then place the slice of cream on the dish. Then top with four small Maraschino cherries. Then serve with a spoon and two sugar wafers.

CRYSTAL SUNDAE TOPPING

8 ounces of gelatine, 5 lbs. of granulated sugar, 12 quarts of water, 1½ ounces of citric acid.

Soak the gelatine in 2 quarts of water for 15 minutes, then add the balance, or 10 quarts, of water, which must be hot. Then stir the gelatine until dissolved, then add the 5 lbs. of granulated sugar and stir until the sugar is dissolved, then add the citric acid. Now then take and divide the batch into 6 different parts, to make the different colors and fruit flavors. Place in ice box to cool.

STRAWBERRY CRYSTAL TOPPING

Color in a vessel one part of the crystal topping with a carmine red color and add crushed strawberries just before the crystal topping starts to set. Then it is ready to be used for topping.

ORANGE CRYSTL TOPPING

Color in a vessel one part of the crystal topping with an orange color, then take and grind through a food chopper 4 seedless oranges and add the ground fruit just before the crystal topping starts to set, or you can use oranges that are peeled and cut in thin slices, which makes a very attractive

topping. It is then ready to be used for topping orange sundaes.

CHOP SUEY CRYSTAL TOPPING

Place in a vessel one part of the crystal topping and just before it starts to set add chopped walnuts, ground Maraschino cherries, grated pineapple, seedless raisins and figs. It is then ready to be used for topping sundaes. When served add some shredded cocoanut on top of the crystal topping.

BANANA CRYSTAL TOPPING

Color in a vessel one part of the crystal topping a light pink color; then, just before the crystal topping sets, add slices of bananas and flavor with banana flavor. When served on sundaes top the banana sundaes with a Maraschino cherry.

FRUIT SALAD CRYSTAL TOPPING

Mix in your crystal topping, just before it sets, grated pineapple, chopped oranges that are peeled, chopped Maraschino cherries and grapes. Then it is ready to be used for topping sundaes. When served on sundaes top with whipped cream and a whole cherry.

CRYSTAL NUT TOPPING

Mix in your crystal topping chopped filberts, walnuts, almonds and pecans. Before the crystal topping starts to set color the crystal topping a light caramel color with burnt sugar color. When served on sundaes top with whipped cream and a half walnut.

PEACH CRYSTAL TOPPING

Mix in the crystal topping canned peaches that are chopped up into small pieces, and color the crystal topping a

light peach color by using a yellow and orange color mixed. When served for sundaes top with whipped cream and a Maraschino cherry.

CHOCOLATE CRYSTAL TOPPING

Mix cocoa powder in the crystal topping as soon as you dissolve the sugar in the gelatine, then stir your topping until your cocoa is thoroughly dissolved. When cold it is ready to be used for topping sundaes. When served for sundaes top with whipped cream.

NOUGAT SRYSTAL TOPPING

Color the crystal topping a light caramel color and flavor with vanilla flavor. Then add chopped pecans and walnuts just before the crystal topping starts to set. Then it is ready to be used for topping sundaes. When served for sundaes top the sundae with a whole Maraschino cherry.

MILK SHAKE DRINKS

Made by the use of the up-to-date mixer.

Electric Mixer used for Mixing Milk or Egg Drinks.
H. B. Gibson, Inc., New York, N. Y.

The milk shake is recognized today as one of the leading drinks served at the fountain and has increased wonderfully in the past year. In preparing the milk or egg drinks you should have the up-to-date electric mixer for mixing the drink thoroughly, as by mixing by hand you cannot produce a satisfactory mixed drink, where if you have installed the electric mixer on your fountain you can produce a drink that is thoroughly mixed which will be smooth and have a creamy consistency when finished.

Milk shakes are prepared by the use of sweet milk and the different flavors. Syrups that contain a great percent of

acid should not be used in preparing a milk shake, as the acid has a tendency to curdle the milk. Use vanilla, chocolate and maple; use 1½ to 2 ounces of flavor to a 10 or 12 ounce glass. In preparing a milk shake do not use shaved ice in the glass; use vanilla ice cream, a small ladle to each milk shake, whether it is made for a plain milk shake or malted milk shake or egg shake drink, as the ice cream will give the drink a delicious creamy flavor as well as cool the drink.

In preparing an egg milk shake use 1 egg only to every 10 ounce glass. Egg malted milk shake, use in preparing 1 egg, 1½ teaspoonfuls of malted milk, 1 ounce vanilla syrup, small ladle of ice cream and sweet milk. Then mix in electric mixer.

Chocolate milk shake, 2 ounces chocolate syrup, 1 egg, small ladle of ice cream and sweet milk. Then mix by electric mixer.

In serving milk shakes with malted milk or eggs, they can be topped off with whipped cream and powder cinnamon, or nutmeg, and serve with straws and 2 small crackers on a dish.

LEMONADE DRINKS

Lemonade, when made into a plain or fancy drink, is always in demand at the fountain during the hot weather months of the year, and the confectioner who builds up a reputation for turning out a good lemonade, plain or fancy, has thereby established his fountain trade. For when once tried, his lemonade is favorably remembered.

PLAIN LEMONADE

To make at fountain, place 1 tablespoonful of powder sugar in a 10 or 12 ounce glass; then cut a large lemon in two parts, then squeeze the juice of the lemon into the glass with an electric lemon squeezer. Then add some shaved

ice and fill the glass with cold water. Shake thoroughly, pour from shaker into glass, then serve with straws.

FANCY LEMONADE DRINKS

To make at the fountain, place 1 tablespoonful of powder sugar in a 10-ounce glass, then cut the leman in two parts and squeeze the juice of one large lemon into the glass, then add some shaved ice and fill the glass with cold water. Then add a little grape juice, then decorate with one slice of orange and one whole Maraschino cherry, then serve with straws.

CHERRY LEMONADE

Place 1 tablespoonful of powder sugar in a 10-ounce glass. Then squeeze the juice of one large lemon into the glass, then add some shaved ice and fill the glass with cold water. Then add one-half ounce of cherry juice, one slice of orange and top with a whole Maraschino cherry. Serve with straws.

STRAWBERRY LEMONADE

Place 1 tablespoonful of powder sugar in a 10-ounce glass, then squeeze the juice of one large lemon into the glass, then add some shaved ice and fill the glass with cold water. Then pour one-half ounce of strawberry concentrated syrup down the sides of the glass after the lemonade has been thoroughly shaken, and do not mix the drink after the strawberry syrup is added in the glass. Then decorate with a slice of orange. Then serve with straws.

PARFAITS

Parfaits, when served at the fountain, make a very popular dish, and when served with different kinds of fruits it affords an opportunity of introducing a new and up-to-date line of specialties served at the fountain.

Parfaits are made by preparing whipped cream, sugar,

eggs, flavors, gelatine and fruits and nuts of all kinds, and then frozen. Parfaits, when served at the fountain can be made by using the ordinary vanilla ice cream for the base, then whipped cream added and mixed. Then, when placed in the parfait glass, use a layer of ice cream, then a layer of crushed fruits, and then ice cream on top of the layer of crushed fruits.

The parfait should be served in a tall, narrow glass, which can be purchased at any confectioners' supply house.

VANILLA PARFAIT

2 gallons of whipping cream (30 per cent), 1 gallon of 20 per cent cream, 1 gallon of 4 per cent milk, 2 dozen eggs 3 ounces of gelatine dissolved in 1 pint of water, 4 ounces of vanilla flavor, 7 lbs. of sugar.

Place the sugar and the milk in a copper kettle tnd eggs and cook on the fire until the mixture will coat the paddle, but do not let the mixture come to a boil. Then take from the fire and add the cream and mix thoroughly, then add the dissolved gelatine, then put in cold room to cool to 40 degrees. Then whip up the whipping cream very stiff, then stir in the whipping cream to the cooled mixture and the vanilla flavor and then freeze.

STRAWBERRY PARFAIT

Strawberry parfait served at the fountain.

Place a layer of vanilla ice cream in a parfait glass, then a ladle full of crushed strawberries, then a layer of vanilla ice cream to fill the glass; then top with whipped cream and a whole strawberry.

CHOCOLATE PARFAIT

Place a layer of vanilla ice cream in a parfait glass, then then add a layer of chocolate ice cream, then a layer of vanilla ice cream then a ladle of chocolate syrup, then over

the syrup add enough vanilla ice cream to fill the glass. Top with whipped cream.

BANANA PARFAIT

Place a layer of vanilla ice cream in a parfait glass, then add a ladle full of banana syrup and a few slices of banana, then add a layer of vanilla ice cream to fill the glass, then top with whipped cream.

WALNUT PARFAIT

Place a layer of caramel ice cream in a parfait glass, then add a ladle full of caramel syrup with chopped walnuts in the syrup. Then add vanilla ice cream to fill the glass and top with chopped walnuts.

MAPLE PARFAIT

Place a layer of maple ice cream in a parfait glass, then add a ladle of concentrated maple syrup, then a layer of vanilla ice cream and top with a ladle of maple syrup and whipped cream.

PINEAPPLE PARFAIT

Place a layer of vanilla ice cream in the parfait glass, then add a ladle of grated pineapple, then add a layer of vanilla ice cream, then top with pineapple cube.

PEACH PARFAIT

Place a layer of vanilla ice cream in the parfait glass, then add a ladle full of crushed peaches, then a layer of vanilla ice cream to fill the glass, then top with whipped cream.

FRUIT SALAD PARFAIT

Place a layer of vanilla ice cream in a parfait, glass, then add a ladle of fruit salad made of chopped Maraschino cher-

ries, crushed strawberries and grated pineapple. Then add a layer of vanilla ice cream on the fruit salad, then top with a whole cherry.

MARSHMALLOW PARFAIT

Place a layer of chocolate ice cream in the parfait glass, then add a ladle full of marshmallow topping, then a layer of vanilla ice cream to fill the glass, and top with whipped cream.

PHOSPHATES

Phosphates are one of the popular drinks served at the fountain, and are made by adding a citric acid solution to the different flavors, and served with cracked ice and carbonated water mixed in a 10-ounce glass.

The following flavors are used in preparing the different phosphate drinks: Orange and strawberry, lemon and cherry, pineapple and orange, raspberry and lemon, grape and orange, lime and orange. In preparting the different flavors use 1 ounce of each syrup flavor to a 10-ounce glass. They can be topped with lemon or orange slices, and to each 10-ounce glass use two to three dashes of citric acid solution.

EGG PHOSPHATES

Egg phosphates are prepared by using 1 ounce of the diffenent flavors, as lemon or orange, pineapple and cherry, with three dashes of citric acid solution, some shaved ice, and one egg; then it is shaken thoroughly, then fill the glass with carbonated water with coarse and fine stream to finish the drink. Egg phosphates should always be topped with nutmeg or powder cinnamon after the drink is finished.

RETAIL SPECIALTIES

The retail confectioner will find in this Up-to-Date Candy Teacher the very latest methods used in the manufacture of the different retail specialties, such as counter goods of all kinds.

For turning out a complete line of retail specialties the retail confectioner should have the following equipment in his workshop. Steam boiler for cooking and heating: Size of boiler 24x7x2½. Type SVT. A steam jacket stirring kettle, 2 chocolate melting kettles, 2 gas blast furnaces, 1 Dayton ball cream beater, 3 copper kettles, 1 10-lb. copper kettle, 1 20-lb copper kettle, 1 25-lb. copper kettle. These kettles are used for cooking on the open fire on the gas blast furnaces. One cold water slab and 2 marble slabs, 1 spinning table with a batch heater, 1 pulling hook, 1 caramel cutting machine, 1 nougat cutting machine, 1 beating machine, 1 bon bon table for dipping bon bons, 1 platform scale, 1 scoop scale, 2 adjustable cutters, 1 rolling pin, 1 chip cutter, 2 5-spout runners, 2 funnel droppers, 1 large butcher knife, 1 French knife, 1 cooking gauge, 1 syrup gauge, 200 starch trays filled with corn starch, 1 starch bin, 2 sieves, 2 bench brushes, 1 bench table 12 feet long for placing starch trays on while running centers in the starch, and molds of all kinds for starch printing.

Showing Retail Work Shop.

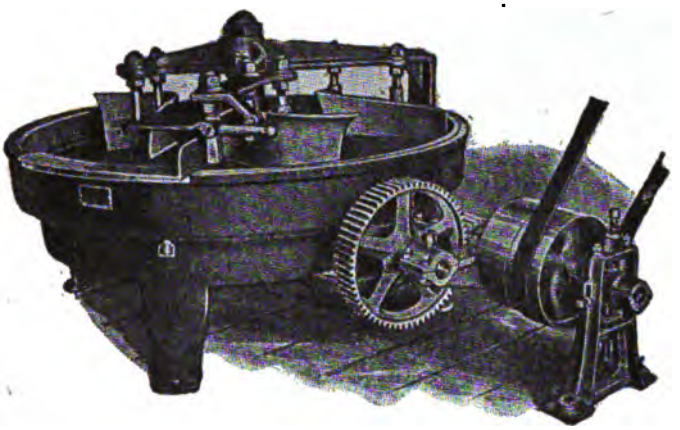
For dipping chocolates you should have the following equipment: Chocolate melting kettles, enrober chocolate dipping machine, 1 electric chocolate dipping table with 4 to 6 electric chocolate heaters, 1 chocolate packing table, 2 tray racks, 1 marble slab for each chocolate dipper, chocolate dipping trays and chocolate dipping paper and mechanical refrigeration for cooling the chocolate room during the warm weather months. A York 2-ton compressor will take care of a chocolate room 20x25x9 foot ceiling when installed by direct expansion.

FONDANT CREAM COOKED ON THE OPEN FIRE IN A 25-LB. COPPER KETTLE

FONDANT CREAM FOR NO. 1 CHOCOLATE CENTERS

Place in a copper kettle and cook on the fire 40 lbs. of granulated sugar, 12 lbs. of corn syrup, 1½ gallons of water. Cook to 238 degrees.

When your batch of syrup is cooked to 238 degrees, pour your syrup on the Dayton ball cream beater and sprinkle the cooling table with 2 cups of cold water before you pour the batch out on the beater, and as soon as the syrup stops bubbling sprinkle the top of the syrup with 2 cups of cold water. That will keep the syrup from having a sugar crust on top, otherwise the cream fondant would be grainy when creamed to a fondant. Then turn the cold water on the beater. Now, when your batch of syrup is cool enough to hold an impression when made into the syrup, your syrup is ready to be creamed to a fondant. When you start to cream your batch to a fondant always turn off the cold water from the cooling table on the machine. When your batch is creamed to a fondant on the beater, then take it from the machine and put it into your cream tubs and place a cover over the cream tubs so that the fondant will not form a hard crust on top; then it is ready to be used in the manufacture of chocolate cream centers.



Dayton Ball Cream Beater. Dayton Ball Cream Beater Co., Dayton, Ohio.

MAPLE FONDANT CREAM FOR NO. 1 CHOCOLATES

Place in copper kettle and cook on open fire 30 lbs. of granulated sugar, 10 lbs. of maple sugar, 12 lbs. of corn syrup, 2 gallons of water. Cook to 238 degrees.

Place the maple sugar and the water in the kettle and thoroughly dissolve the maple sugar, then add the granulated sugar and then the corn syrup, then cook to 238 degrees. Then finish on the ball cream beater the same as for plain fondant.

GLAZE BON BON CREAM FONDANT

Place in a copper kettle and cook on the open fire 40 lbs. of cane sugar, 1 2-3 ounces of acetic acid No. 8, 7 quarts of water. Cook to 243 degrees.

Pour out on ball cream beater that is sprinkled with 2 cups of cold water and sprinkle the top of the syrup with 14 ounces of gelatine solution.

Gelatine solution, made for sprinkling the top of the syrup for glaze cream fondant:

Dissolve 2 ounces of gelatine in 14 ounces of water by heating the water lukewarm, after the gelatine is added to the water.

Dissolve the gelatine solution always before you start to cook your batch of glaze fondant so that the gelatine solution is cool when it is used for sprinkling the top of the syrup.

For bon bon glaze cream do not let the syrup get too cold on the beater before you start to cream the batch to a fondant. Glaze dipping cream should never be made up for stock. Make only the amount that will be used for the day's dipping. Glaze cream when left standing for any length of time in the cream tubs will not produce a fine gloss on the dipped goods.

GLAZE DIPPING CREAM MADE WITH GUM ARABIC

Soak over night 1½ ounces of gum arabic in 6 ounces of water. Place in a copper kettle and cook on the open fire 40 lbs. of cane sugar, 1½ ounces of acetic acid, No. 8 only; 7 quarts of water.

Cook to 240 degrees, then add the dissolved gum arabic solution and finish cooking the batch to 243 degrees. Then pour out on ball cream beater that is sprinkled with two cups of cold water, and sprinkle the top of the syrup with the gelatine solution, 2 ounces of gelatine to 14 ounces of water disolved.

SPECIAL EGG FONDANT

To be used in the manufacture of all chocolate cream centers.

Read's Three Speed Beater. Read's Machinery Co., York. Pa.

Soak over night in a glass jar 7 ounces of egg albumen in 1 pint of cold water. Then pour into your beating machine and add 10 lbs. of corn syrup and beat up very stiff. Now place in a copper kettle and cook on the open fire 10 lbs. of granulated sugar, 2 lbs. of corn syrup, 3 pints of water.

Cook to 242 degrees for cold weather or 245 degrees for warm weather. Pour this cooked syrup into the beaten egg albumen and corn syrup and beat very light, then add 38 lbs. of raw corn syrup and beat thoroughly on slow speed on the machine for 15 minutes, then add 1 ounce of car-

bonate of soda and thoroughly mix through the batch. Then it is ready to be used in the manufacture of chocolate cream centers.

This special fondant should be made up for stock and should be put in small barrel or jar. This special fondant will keep when made up for stock, as I have kept it for over 3 months.

Special fondant will keep your chocolate centers soft and will keep your chocolate creams from leaking after they are dipped in chocolate coating.

In using special fondant in chocolate cream centers, use 50 lbs of special fondant to 100 lbs. of No. 1 fondant cream. This proportion will make a soft, creamy chocolate center.

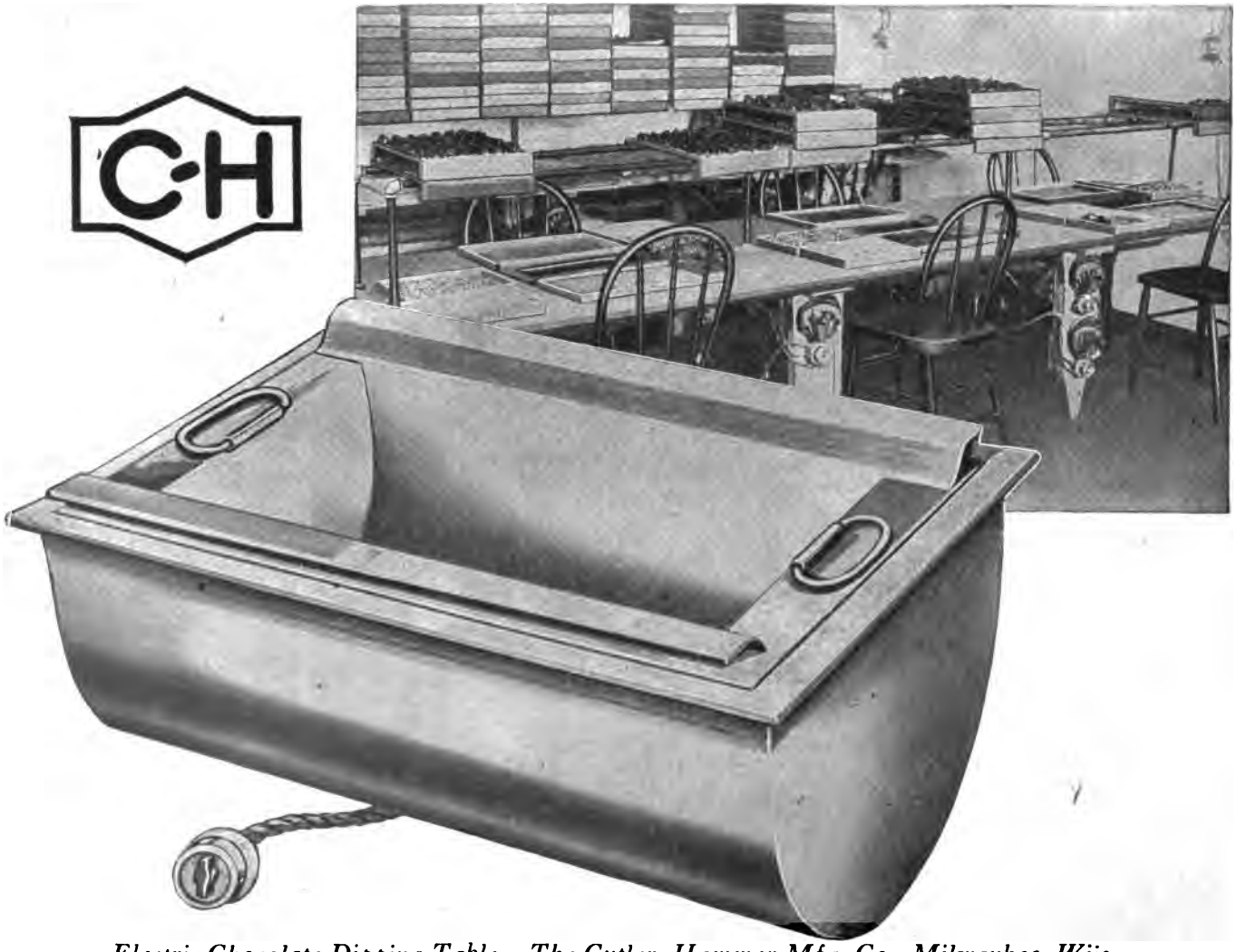
Special egg fondant should only be added after the cream fondant is heated and melted so that it is thin enough to cast. Then the special egg fondant should be added and thoroughly mixed and heated so that the cream can be casted by machine or by hand runner.

NO. 1 CHOCOLATE CREAM CENTERS FOR PACKAGE GOODS

VANILLA CREAM CENTER

25 lbs. of No. 1 fondant cream, 12 lbs. of special fondant, 3 ounces of vanilla flavor.

Place the 25 lbs. of No. 1 fondant cream in a copper kettle and place on the gas furnace, then melt the cream thin enough to cast, then add the 12 lbs. of special egg fondant and mix thoroughly with a paddle, then add the 3 ounces of vanilla flavor and only heat the cream hot enough so that it can be casted by machine or 5 spout runner. Cast in a round shaped mold and let stand in starch over night; then, next morning, take out of starch and brush the starch from the centers, then dip in vanilla coating or milk coating. For extra soft center add one-half pint of water when melting cream.



Electric Chocolate Dipping Table. The Cutler, Hammer Mfg. Co., Milwaukee, Wiis

STRAWBERRY CREAM CENTER

Place 25 lbs. of No. 1 cream fondant in a copper kettle and place on the fire; then melt the cream fondant thin enough to cast, then add 12 lbs. of special fondant and mix thoroughly and use very little heat in melting the cream; then add 2 lbs. of crushed strawberries that have been cooked down to a jam, then add 1 ounce of citric acid dissolved in 2 ounces of water, then color the batch a light pink color. Then cast in starch and let stand over night. Then, next day, dip in chocolate.

For extra soft strawberry center use 12 lbs. of special egg fondant.

PINEAPPLE CREAM CENTER

Place 25 lbs. of cream fondant in a copper kettle and place on the fire, then melt the cream thin enough to cast. Then add 12 lbs of special fondant and mix thoroughly and use very little heat in melting the cream, then add 2 lbs of grated pineapple that has been cooked to a jam, then add 1 ounce of citric acid dissolved in 3 ounces of water. Then color the batch a very light yellow color. Then cast in starch and let stand over night. Then dip in chocolate.

COCOANUT CREAM CENTER

Place 25 lbs. of cream fondant in a copper kettle and place the kettle on the fire. Then melt the cream thin enough to cast, then add 12 lbs. of special fondant and mix thoroughly with a paddle while melting the cream, and use very little heat while melting down the cream. Then add 2 lbs. of macaroon cocoanut and 3 ounces of vanilla flavor, then add one-half pint of water, then cast in starch and let stand over night; then, next day, dip in chocolate coating.

MAPLE CREAM CENTER, PLAIN

Place 25 lbs. of maple fondant cream in a copper kettle

and then place the kettle on the fire. Then melt the maple cream thin enough to cast. Then add 12 lbs. of special fondant and mix thoroughly while melting down thin enough to cast. Then add 1 ounce of maple flavor and color with burnt sugar color a light maple color. Then cast in starch.

MAPLE NUT CREAM CENTER

Make the batch the same as the plain maple center, then have girls drop pecan or walnut pieces in the impressions in the starch. Then cast the maple cream fondant on the nut meats that are in the starch. Then let stand over night. then dip in chocolate coating.

CHOCOLATE CREAM CENTER

Place 25 lbs. of fondant cream in a copper kettle, and then place on the fire, then melt the cream thin enough to cast, then add 12 lbs. of special fondant and mix thoroubhly with a paddle while melting down the cream, then add 2 lbs. of cocoa powder and mix thoroughly. Then add 1 pint of water and 2 ounces of vanilla flavor. Then cast in starch and let stand over night. Then dip in chocolate.

MINT CREAM CENTERS

Place 25 lbs. of fondant cream in a copper kettle, then place on the fire, then melt the cream thin enough to cast, then add 10 lbs. of special fondant and mix thoroughly with a paddle, while melting down the cream. Then add one-half ounce of oil of peppermint flavor for a mild flavor, or two-thirds ounce of oil of peppermint for a strong flavor. Then add one-half pint of water, then mix thoroughly and cast in starch. Let stand over night, then dip in chocolate.

CARMINT CREAM CENTER, CARAMEL AND CREAM CENTER

Caramel Part: Cook in a copper kettle on the open fire

15 lbs. of corn syrup, 10 lbs. of sugar, one-half lb. of Nuco butter, 1 quart of water. Cook to 260 degrees, then add slowly 6 lbs. of condensed milk and stir the batch continuously while adding the condensed milk and cook the batch to a stiff ball when tried in cold water, or 245 degrees, then add 2 ounces of vanilla flavor. Then cast in starch impression only half full.

Cream Part: Place 25 lbs. of fondant cream in copper kettle, then place on the fire, then melt the cream fondant thin enough to cast, then add 10 lbs. of special fondant and mix thoroughly with a paddle while melting down the cream, then add one-half ounce of oil of peppermint flavor and one-half pint of water and mix thoroughly; then cast on top of the caramel part. Then let stand in starch over night. Then dip in chocolate coating.

BUTTER SCOTCH CREAM CENTER

Butter Scotch Part: Cook in copper kettle on the open fire 12 lbs of corn syrup, 9 lbs. of sugar, 1 quart of water, one-half pound of Nuco butter. Cook to 260 degrees, then add 4 lbs. of condensed milk and 1 lb. of creamery butter; then cook the batch to 245 degrees or stiff ball, when tried in cold water. Stir the batch continuously when you add the condensed milk, or the batch will scorch on the bottom of the kettle. Then add 1½ ounces of salt, then cast in starch and fill the impression of the mould only one-third full.

Cream Part: Place in a copper kettle 25 lbs. of fondant cream, then place on the fire, and melt the cream thin enough to cast, then add 10 lbs. of special fondant and mix thoroughly with a paddle, then add one-half pint of water and 2 ounces of vanilla and 5 drops of lemon. Mix thoroughly, then cast on top of the butterscotch and let stand in starch over night, then dip in chocolate.

CHOCOLATE CREAM PUDDING

Place 20 lbs. of fondant cream in a copper kettle, then place on the fire, then melt the fondant cream thin enough to cast. Then add 10 lbs. of special fondant and mix thoroughly. Then add 2 lbs. of dark cocoa powder, then add 3 ounces of vanilla flavor and cast in a mold the shape of a bon bon cup which is used for packing chocolates with. Then let stand in starch over night, then dip in chocolate, and as soon as the center is dipped in the coating, place the dipped chocolate center in a wax paper bon bon cup, then sprinkle the top of the chocolate pudding with blanched almonds chopped up fine, or you can give the almonds a very light roast.

CREAM TINGLINGS

Cream Part: Place 20 lbs. of maple fondant cream in a copper kettle and place on the fire, then melt the cream thin enough to cast, then add 11 lbs. of special fondant cream and mix thoroughly, then add 1 ounce of maple flavor and cast in oblong shap mold, then let stand over night, then dip in vanilla coating that is made up with 20 lbs. chocolate coating and 3 lbs. of crushed tingling.

Tingling made for using in the coating to dip with:

Place in a copper kettle 12 lbs. of sugar, 3 lbs. of corn syrup, 3 pints of water. Cook to 300 degrees in cold weather or 310 degrees in warm weather. Then add 1 pint of molasses and 1 lb. of butter and cook to 300 degrees, then pour out on a greased slab; then, when cold enough to handle, pull well on the hook, then twist out the air from the batch and bar the batch thoroughly; then spin out very thin, like spinning out chips. Then, when cold, take a rolling pin and crush up very fine. Then it is ready to be mixed with the chocolate. Do not mix the crushed tingling in the chocolate

melting kettle. Mix the tingling in the chocolate tank on the dipping table.

CHOCOLATE DIANA CENTERS

Made with half chocolate caramel and half cream fondant.

Caramel Part: Place in copper kettle 14 lbs. of corn syrup, 9 lbs. of sugar, one-half lb. of Nuco butter, 1 quart of water. Cook to 260 degrees; then add 4 lbs. of condensed milk and cook to 245 degrees, or a stiff ball when tried in cold water, then add 16 lbs. of liquor chocolate that is cut up fine and mix thoroughly in on the fire, then add 1 ounce of vanilla flavor, then cast in starch and fill the mold only one-third full of chocolate caramel.

Cream Part. Place 25 lbs. of fondant cream in a copper kettle. Then place on the fire, then melt the cream thin enough to cast, then add 11 lbs. of special fondant cream and mix thoroughly, then add 2 ounces of vanilla flavor, and cast on top of the chocolate caramel, then let stand over night in starch, then take out and dip in chocolate.

PEANUT BUTTER DELIGHTS

Place 4 lbs. of peanut butter in a bon bon kettle and heat the peanut butter warm, then add 2 ounces of salt and mix thoroughly. Now place in a copper kettle and cook on the open fire 15 lbs. of sugar, 3 lbs. of corn syrup, 2 quarts of water. Cook to 310 degrees, then add 1 pint of molasses and 8 ounces of creamery butter; then stir the batch thoroughly as soon as you add the molasses and butter. Then pour out on a greased slab. When cool enough to handle take one-fourth of the batch for a clear jacket, then pull the rest of the batch well on the pulling hook. Then twist out the air and flatten out on the spinning board. Then place the warm peanut butter in the center and fold up the jacket and close both ends, then pull out about 4 feet long, then fold

up and continue pulling out and folding up until you have folded the batch 6 times; then take the clear jacket and fold around this peanut butter honey-comb batch, then spin out the size of a lead pencil and cut in sticks 2 inches long, then dip in chocolate when cold.

CHOCOLATE CUPID CHIPS

Grind 4 lbs. of roasted almonds through a food chopper. Place in a copper kettle and cook on the open fire 6 lbs. of sugar, 4 lbs. of corn syrup, 1 quart of water. Cook to 295 degrees, then add 4 lbs. of ground almonds and mix thoroughly on the fire, then pour out on a greased slab. Then add 1 ounce of salt and fold up the batch about 3 times. Then roll one-third of the batch down at a time very thin on the heating board on the spinning table; roll down to one-eighth inch thick, then cut with the adjustable cutters three-eighths of an inch wide and 1¼ inches long. When cold dip in chocolate.

MOLASSES CHIPS

Place in a copper kettle and cook on the open fire 15 lbs. of sugar, 5 lbs. of corn syrup, one-half gallon of water. Cook to 300 degrees for cold weather or 310 degrees for warm weather. Then add 1 pint of molasses and 1 lb. of creamery butter and cook the batch to 300 degrees, then pour out on a greased slab, then add 2 ounces of salt, then fold the batch up and when cool enough to handle, pull well on the hook. Then twist out the air and bar the batch well on the spinning board. Then spin out very thin and cut with a chip cutter or adjustable cutter. When cold dip in chocolate.

MOLASSES HONEY-COMB CHIPS

Place in a copper kettle and cook on the open fire 15 lbs. of sugar, 5 lbs. of corn syrup and one-half gallon of water.

Cook to 290 degrees, then add 1 pint of molasses and finish cooking the batch up to 290 degrees, as the molasses will slack the batch back. Then pour out on a greased slab, then fold up the edges as soon as you are able to handle the batch. Then pull on the hook and twist out all the air well. Then take the batch and place on the heating board and bar the batch well. Then flatten the batch out and place a 2-inch pipe about 2 feet long in the center of the flat batch, then fold the batch around the pipe and close one end of the batch tight, then take and draw the pipe out and take a small bicycle pump and pump some air in the hollow batch. Then close the end of the batch tight and pull the batch out about 6 feet long, then fold the two ends together, then pull out again about 6 feet, then fold up again and continue pulling out and folding up from 6 to 8 times. Then spin out about one-eighth inch thick and cut with a chip cutter. Then, when cold, dip in chocolate.

CHOCOLATE STRAWS

Place 3½ lbs. of liquor chocolate in a bon bon kettle and heat the chocolate warm.

Place in a copper kettle and cook on the open fire 15 lbs. of cane sugar, 3 lbs. of crystal fondant, with 3 quarts of water. Cook to 325 degrees. Pour out on a greased slab. When cold enough to handle, pull well on the hook, and twist out the air; then bar the batch good on the spinning board, then flatten the batch out about 1 inch thick, then add a very little water in your melted chocolate that is in the bon bon kettle. Add just enough water to thicken the chocolate. Then place this chocolate in the center of the batch and fold the batch around the chocolate center. Then close both ends and spin out the size of a lead pencil and cut in sticks about 1¾ inches long. When cold dip in chocolate.

MINT CHIPS

Place 1 lb. of Nuco butter in the bon bon kettle and melt the Nuco butter; then add enough powder 4 X sugar to make a stiff paste. Then mix thoroughly with a paddle, then flavor with one-fourth ounce of oil of peppermint.

Place in a copper kettle and cook on the open fire 15 lbs. of cane sugar, 2½ lbs. of crystal fondant, with 3 quarts of water. Cook to 325 degrees, then pour out on a greased slab, and when cold enough to handle pull well on the hook. Then twist out the air and bar the batch well on the spinning board. Then flatten the pulled batch out and place the stiff paste made of Nuco butter and powder sugar. Place the Nuco butter in the center of the batch and fold the jacket around the center, then close both ends.Save one-third of the batch for an outside jacket, then take the batch with the Nuco butter center and pull out about 6 feet; then fold up about 6 to 8 times, then wrap the pulled jacket around the batch and shape the batch so that you can spin the batch out in very thin strips three-eighths inch wide and one-eighth inch thick and 1½ inches long. Then, when cold, dip in chocolate.

PEANUT BUTTER CROQUETTES

Place 5 lbs. of peanut butter in the bon bon kettle and heat the peanut butter warm, then add 2 ounces of salt and mix thoroughly. Place in a copper kettle and cook on the open fire 15 lbs. of sugar, 4 lbs of corn syrup, with 3 quarts of water. Cook to 310 degrees, then add 1 pint of molasses and 1 lb. of creamery butter, then cook the batch to 300 degrees in cold weather or 310 degrees in warm weather. Then pour out on a greased slab, and when cold enough to handle, add 1 ounce of salt and mix in the batch.

Then pull the batch well on the hook. Then twist out the air and bar the batch well on the spinning board. Then take one-third of the batch and save for an outside wrapper.

STRAWBERRY CREAM CENTER

Place 25 lbs. of No. 1 cream fondant in a copper kettle and place on the fire; then melt the cream fondant thin enough to cast, then add 12 lbs. of special fondant and mix thoroughly and use very little heat in melting the cream; then add 2 lbs. of crushed strawberries that have been cooked down to a jam, then add 1 ounce of citric acid dissolved in 2 ounces of water, then color the batch a light pink color. Then cast in starch and let stand over night. Then, next day, dip in chocolate.

For extra soft strawberry center use 12 lbs. of special egg fondant.

PINEAPPLE CREAM CENTER

Place 25 lbs. of cream fondant in a copper kettle and place on the fire, then melt the cream thin enough to cast. Then add 12 lbs of special fondant and mix thoroughly and use very little heat in melting the cream, then add 2 lbs of grated pineapple that has been cooked to a jam, then add 1 ounce of citric acid dissolved in 3 ounces of water. Then color the batch a very light yellow color. Then cast in starch and let stand over night. Then dip in chocolate.

COCOANUT CREAM CENTER

Place 25 lbs. of cream fondant in a copper kettle and place the kettle on the fire. Then melt the cream thin enough to cast, then add 12 lbs. of special fondant and mix thoroughly with a paddle while melting the cream, and use very little heat while melting down the cream. Then add 2 lbs. of macaroon cocoanut and 3 ounces of vanilla flavor, then add one-half pint of water, then cast in starch and let stand over night; then, next day, dip in chocolate coating.

MAPLE CREAM CENTER, PLAIN

Place 25 lbs. of maple fondant cream in a copper kettle

and then place the kettle on the fire. Then melt the maple cream thin enough to cast. Then add 12 lbs. of special fondant and mix thoroughly while melting down thin enough to cast. Then add 1 ounce of maple flavor and color with burnt sugar color a light maple color. Then cast in starch.

MAPLE NUT CREAM CENTER

Make the batch the same as the plain maple center, then have girls drop pecan or walnut pieces in the impressions in the starch. Then cast the maple cream fondant on the nut meats that are in the starch. Then let stand over night. then dip in chocolate coating.

CHOCOLATE CREAM CENTER

Place 25 lbs. of fondant cream in a copper kettle, and then place on the fire, then melt the cream thin enough to cast, then add 12 lbs. of special fondant and mix thoroubhly with a paddle while melting down the cream, then add 2 lbs. of cocoa powder and mix thoroughly. Then add 1 pint of water and 2 ounces of vanilla flavor. Then cast in starch and let stand over night. Then dip in chocolate.

MINT CREAM CENTERS

Place 25 lbs. of fondant cream in a copper kettle, then place on the fire, then melt the cream thin enough to cast, then add 10 lbs. of special fondant and mix thoroughly with a paddle, while melting down the cream. Then add one-half ounce of oil of peppermint flavor for a mild flavor, or two-thirds ounce of oil of peppermint for a strong flavor. Then add one-half pint of water, then mix thoroughly and cast in starch. Let stand over night, then dip in chocolate.

CARMINT CREAM CENTER, CARAMEL AND CREAM CENTER

Caramel Part: Cook in a copper kettle on the open fire

in this butter scotch syrup with a bon bon dipping fork, then drop them on a greased slab. So that the marshmallows do not get flat bottoms on them, have a girl turn the marshmalows over as fast as the girls dip them. Then, when cold, they are ready for the counter.

GLAZED CREAM WAFERS

Melt in a bon bon kettle 5 lbs. of glaze fondant cream and heat the cream thin enough so that it can be casted with a funnel dropper, then drop on wax paper and flavor with oil of peppermint; or they can be made in different flavors and colors. Then, when they are casted by funnel dropper and are thoroughly set, turn the wafers over, as that will keep them from spotting. Then they are ready to be dipped in the glaze syrup.

Glaze Syrup: Cook in a copper kettle on the open fire 6 lbs. of sugar, cane sugar only; 3 lbs. of corn syrup, 1 quart of water. Cook to 290 degrees, then dip the cream wafers in this syrup with bon bon dipping forks, and dip them as soon as possible, so that the syrup will not change its color.

NEW ENGLAND TAFFY

Place in a copper kettle and cook on the open fire 10 lbs. of sugar, 4 lbs. of condensed milk, 2 lbs. of Nuco butter, 5 lbs. of molasses, 8 lbs. of corn syrup, 8 lbs of crystal fondant. Cook to stiff ball, or 250 degrees. Then add 2 ounces salt and 1 ounce of vanilla. Pour out on a greased slab; then, when cool enough to handle, pull on pulling machine very light, then size down to one-half inch thick, then cut on caramel cutting machine. Then dip in chocolate.

CARAMEL PECAN SWEETS

Place in stirring kettle and cook on the open fire 10 lbs. of corn syrup, 5 lbs. of sugar, 6 lbs. of condensed milk, 1½ lbs. of Nuco butter. Cook to stiff ball when tried in cold

water, then add 6 lbs. of pecans ground through the food chopper, then add 2 ounces of vanilla flavor and 2 ounces of salt. Then pour out on a greased slab dusted with flour, with rods three-eighths inch high. Then, when cold, cut in squares five-eighths inch square.

Portable Fire Mixer for Cooking Caramel Work on Open Fire. Savage Bros. Co., Chicago, Ill.

CHOCOLATE DIPPED MARASCHINO CHERRIES

Fondant cream to be used for dipping the Maraschino cherries:

Place in a copper kettle and cook on the open fire 40 lbs. of sugar, 2 ounces of acetic acid No. 8, with 1¾ gallons of water. Cook to 242 degrees, then pour out on ball cream

beater that is sprinkled with 2 cups of cold water, then sprinkle the top of the batch with 2 cups of cold water; then, when partly cool so that the syrup will hold an impression when made into the hot syrup, start to cream the batch to a fondant. Then it is ready to be used for dipping the Maraschino cherries.

Maraschino cherries that are to be dipped in a cream fondant and then in chocolate coating, should always be heated in a kettle, and the cherry syrup should be heated to the boiling point. Then let the Maraschino cherries drain over night, or at least 3 hours before dipping. That will prevent the cherries from leaking or bursting the chocolate coating.

Maraschino cherries that have started to work or ferment should never be used for dipping, as the cherries will cause the fondant cream to dissolve too fast into a syrup, then this fermented syrup will eat itself through the chocolate coating or will burst the chocolate shell on the cherries.

Maraschino cherries that have started to ferment or work can be treated to a heavy syrup and then drained and placed on trays to dry, and can be used for nougat work of all kinds, as glazed cherries.

Syrup to glaze the Maraschino cherries: Place in a copper kettle and cook on the open fire, or by steam, 10 lbs. of sugar, 5 lbs of corn syrup, two-thirds of a gallon of water.

Cook to 226 degrees on cooking gauge. Drain the cherries well from cherry syrup, then place the Maraschino cherries in crystal pans, and fill the pans about two-thirds full; then pour this cooked syrup on the cherries in the crystal pans while the syrup is hot. Then let stand for 7 hours in this syrup, then drain the syrup from the cherries well by placing the cherries in trays with a wire screen bottom, then let dry for a day. Then they can be used for nougat work of all kinds.

CHOCOLATE DIPPED PINEAPPLE CUBES

Take 1 gallon of pineapple cubes and place in a copper kettle, then place on the fire and cook the syrup on the pineapple cubes to the boiling point, then let drain over night in a sieve. Then dip in the same fondant cream that is used for Maraschino cherries.

CHOCOLATE ALMOND MARRION

Center Part: Place in a copper kettle and cook on the open fire 4 lbs. of corn syrup, 2 lbs. of sugar, one-half lb. of Nuco butter, 1 pint of water. Cook to 260 degrees, then add 3 lbs. of condensed milk and cook to a stiff ball when tried in cold water, or 245 degrees. Take from the fire and add 3 lbs. of No. 1 fondant cream and 5 lbs. of almond paste and mix thoroughly. Then add 2 lbs. of ground pecans and pour out on a slab that is dusted heavy with flour, and let cool.

Jacket Part. Place in a copper kettle and cook on the open fire 25 lbs. of cane sugar, 5 lbs. of crystal fondant, 1 gallon of water. Cook to 239 degrees, pour out on ball beater that is sprinkled with two cups of cold water; then, when cool enough to hold an impression in the syrup, cream to a fondant.

Sprinkle the top of the syrup when it is poured out on the beater with 2 cups of cold water. Now take this cream fondant and knead up on a slab, then divide the almond center into 5 parts, and the same with the cream fondant. Then wrap the cream fondant around the almond paste center, then roll out and cut with a palette knife the same as for hand rolls. Then dip in chocolate.

CHOCOLATE DIPPED NOUGAT

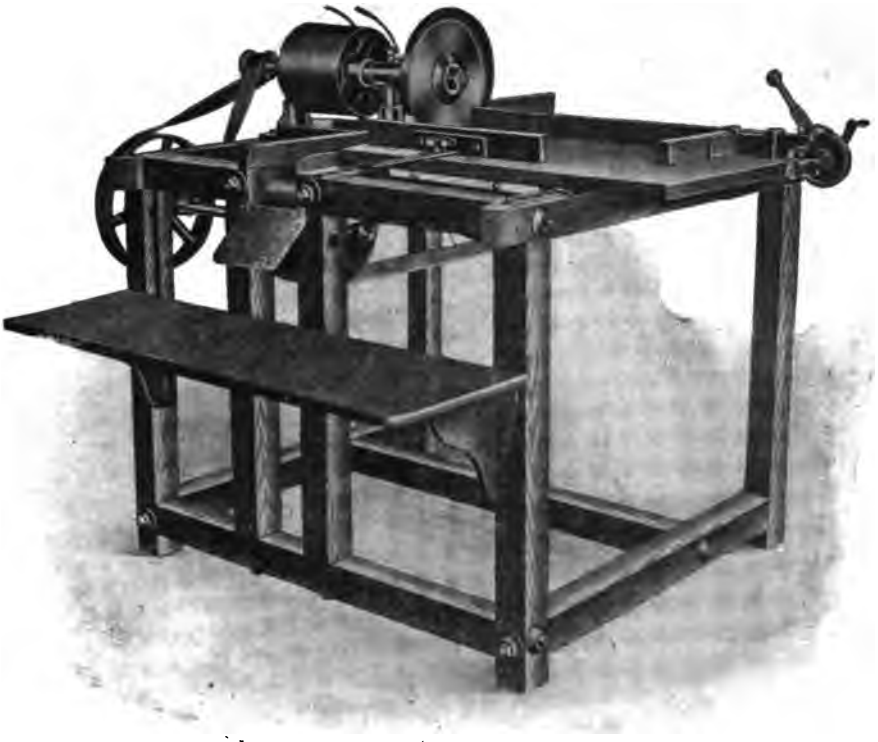
Soak over night in a glass jar 7 ounces of egg albumen in 1 pint of water. Then place 2 lbs. of nougat fondant in the beating machine with the dissolved egg albumen and beat

the egg albumen and nougat fondant up very light. Now cook in a copper kettle on the open fire 5 lbs. of corn syrup, 5 lbs. of sugar, with 1 quart of water. Cook to 260 degrees. Pour this cooked syrup into the beaten egg albumen batch and beat up very stiff.

Now cook Part 2 syrup.

Place in a copper kettle and cook on the open fire 8 lbs. of corn syrup, 5 lbs. of sugar, with 1 quart of water. Cook to 260 for cold weather or 262 degrees for warm weather. Then pour this Part 2 batch into the beaten batch and mix thoroughly, then add 1 lb. of flour and 1½ lbs of Nuco butter and mix through the batch on slow speed, then flavor with 2 ounces of vanilla and add 2 lbs. of almonds, 1½ lbs. of glazed cherries and 1 lb. of pineapple fingers cut up into small pieces.

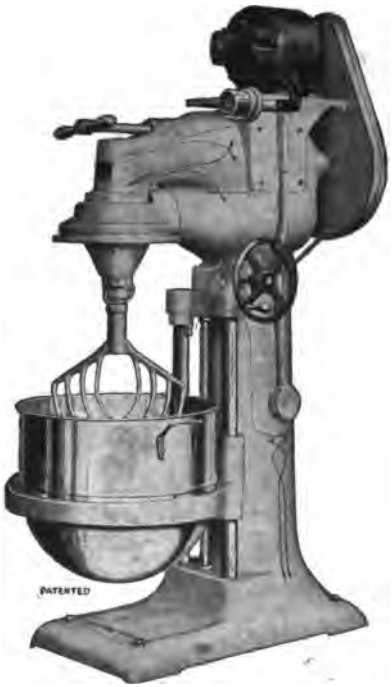
Pour out on a nougat tray 24x36 lined with kraft paper with rods on the tray 1½ inches high. Then dust the top of the batch with flour and let stand over night. Then cut in strips on the nougat cutter. Then dip in chocolate.



Nougat Cutting Machine. Racine Machinery Co., Racine, Wis.

CHOCOLATE HONEY NOUGAT

Soak 7 ounces of egg albumen in 1 pint of water over night in a glass jar. Place in beating machine 2 lbs. of nougat fondant and the dissolved egg albumen and beat up very light.



Three Speed Nougat Beater. Read's Machinery Co., York, Pa.

Now place in a copper kettle and cook on the open fire 5 lbs of corn syrup, 5 lbs. of sugar, 1 quart of water. Cook to 260 degrees, then pour into the beaten egg batch and beat very stiff, and use the second speed.

Now cook Part 2:

Place in a copper kettle and cook on the open fire 5 lbs. of sugar, 3 lbs. of honey, 8 lbs. of corn syrup, with 1 quart of water, and cook to 260 degrees for cold weather or 262 degrees for warm weather, then pour this Part 2 into the beaten batch and mix thoroughly. Then add 2 ounces of vanilla flavor, 1 lb. of flour and 1½ lbs. of Nuco butter and

mix thoroughly. Then pour out on a tray 24x36 with rods 1½ inches high and the tray lined with kraft paper. Then dust the top of the batch with flour. Let stand over night; then, next morning, turn the batch over and wet the paper with with a wet cloth. Then you can pull the paper off from the nougat. Then dust the batch with flour or starch. Then cut in strips on the nougat cutter. Then dip in chocolate.

CHOCOLATE CARNUT

Caramel Part: Place in a copper kettle with portable fire mixer 6 lbs. of corn syrup, 4 lbs. of sugar, 1 lb. of Nuco butter, 4 lbs. of condensed milk. Cook to stiff ball when tried in cold water, then add 1 ounce of vanilla flavor and 1 ounce of salt. Then pour out on a greased slab to cool. Then, when cool enough, cut up in squares. Then spread out on a slab.

Nougat Part: Soak over night 7 ounces of egg albumen in 1 pint of water. Place 2 lbs of special nougat fondant in the beating machine with the dissolved egg albumen and beat very light. Now place in copper kettle and cook on the open fire 5 lbs. of corn syrup, 5 lbs. of sugar, 1 quart of water. Cook to 250 degrees, then pour this cooked syrup into the beaten egg and beat up very stiff.

Now cook Part 2. Place in a copper kettle and cook on the open fire 5 lbs. of sugar, 8 lbs. of corn syrup, 1 quart of water. Cook to 260 degrees for cool weather or 262 degrees for warm weather. Pour this Part 2 batch into the beaten batch and mix the Nuco butter in the batch thoroughly, then add 2 ounces of vanilla flavor, then pour this nougat batch out on the cut caramels that are on the slab, then fold up 4 times and size down to three-eighths inch thick. Then, when cold cut in squares and dip in chocolate. Cut the carnut in six-eighths inch squares on caramel cutter.

NO. 1 VANILLA CARAMEL CHOCOLATE DIPPED

Cook on the open fire with the portable mixer.

Place in the copper kettle 6 lbs. of sugar, 10 lbs. of corn syrup, 7 lbs. of sweetened condensed milk, 1 lb. of Nuco butter. Cook to stiff ball when tried in cold water. Then add 1½ ounces of canilla flavor and 1 ounce of salt. Then pour out on a greased slab that is dusted with flour or starch. Then, when cold, cut in squares five-eighths inch square. Then dip in chocolate.

NO. 2 CHOCOLATE DIPPED CARAMEL

Cook on the open fire with the portable mixer.

Place 12 lbs. of assorted scrap, as centers scrap and chocolate scrap, in a copper kettle with 3 quarts of water. Then dissolve the scrap by cooking. Then strain through a fine sieve. Then add 6 lbs. of corn syrup and 8 lbs. of condensed milk and 1 lb. of Nuco butter. Then cook to a stiff ball when tried in cold water. Then add 2 ounces of vanilla flavor and 1½ ounces of salt. Then pour out on a greased slab to cool. When cold cut in caramels and dip in chocolate.

CHOCOLATE DIPPED CREAM CARAMELS

Cook on the open fire with the portable mixer 5 lbs. of sugar, 8 lbs. of corn syrup, 1 gallon of cream (20 per cent), 1 lb. of Nuco butter. Cook to a stiff ball when tried in cold water, then add 4 lbs. of condensed milk, sweetened. Then cook to a stiff ball when tried in cold water. Then add 2 ounces of vanilla flavor and 1½ ounces of salt. Pour out on a greased slab to cool. When cold cut in caramels and dip in chocolate.

WALNUT VANILLA CARAMELS, CHOCOLATE DIPPED

Cook on the open fire with the portable mixer 5 lbs. of sugar, 9 lbs. of corn syrup, 1 lb. of Nuco butter, 5 lbs. of

sweetened condensed milk. Cook to a stiff ball when tried in cold water, or 245 degrees. Then add 3 lbs. of ground walnuts and mix thoroughly, then add 2 ouunces of vanilla flavor and 1½ ounces of salt. Then pour out on a greased slab. Then, when cold, cut in caramels and dip in milk chocolate.

FIG COCOANUT CARAMEL, CHOCOLATE DIPPED

Place in a copper kettle and cook on the open fire 4 lbs. of sugar, 8 lbs. of corn syrup, 1 pint of water, 1 lb. of Nuco butter. Cook to 250 degrees, then add 3 lbs. of condensed milk and cook the batch to a soft ball when tried in cold water. Then turn off the heat from the kettle and add 4 lbs. of ground figs and 8 lbs. of macaroon cocoanut and mix thoroughly. Then add 1 ounce of vanilla flavor and one-half pound of flour and mix thoroughly. Then pour out on a greased slab that is dusted heavily with starch or flour, then spread out with a paddle, then roll down to three-eighths inch thick, and when cold cut in five-eighths inch squares, then dip in chocolate.

APRICOT JELLY, CHOCOLATE DIPPED

Soak 8 ounces of Jap gelatine in 2 gallons of water for one hour. Cook on the open fire with the portable mixer. Place the soaked Jap gelatine in the copper kettle, then place on the fire and start the mixer going, then thoroughly dissolve the Jap gelatine, then add 15 lbs. of sugar and 10 lbs. of corn syrup and cook the jelly until it strings from a paddle or palette knife. Then pour out in a tin tub or kettle to cool until lukewarm.

Now, while the Jap gelatine is cooling, cook on the open fire in a copper kettle. Strain 1 gallon of apricot pulp through a sieve by rubbing the pulp through the sieve with a brush. Then add 5 lbs. of sugar and 4 lbs. of corn syrup

and cook until the apricot jelly drops in small sheets from a paddle, then pour this apricot cooked pulp into the Jap gelatine batch that is lukewarm, then add 2 ounces of citric acid and mix thoroughly. Then cast in round or oblong molds in starch. Let stand over night, then dip in chocolate.

CHOCOLATE DIPPED MARSHMALLOWS

Place in copper kettle 12 ounces of gelatine with 5½ lbs. of water, then place on the fire and heat the water until the gelatine is thoroughly dissolved; but you must not let the water come to a boil. Then add 10 lbs. of granulated sugar and 2 lbs. of corn syrup to the dissolved gelatine water, then thoroughly dissolve the sugar in the gelatine water by a little heat, but do not let the batch come to a boil, or else you will destroy the setting in the gelatine.

Then pour the batch into the marshmallow beater and beat very light.

While the batch is beating in the beater, place in a copper kettle 10 lbs. of corn syrup, and heat this corn syrup to the boiling point only; then add this heated corn syrup to the beaten batch and mix thoroughly for 5 minutes, then add 2 ounces of vanilla flavor, then cast in dry hot starch, then let stand until next day in starch, then dip in chocolate.

This marshmallow, when dipped next day after being made, will be extra soft. By leaving them in the starch for 2 days they will have a firmer body.

20TH CENTURY CHOCOLATE HAND ROLLS

Manufacturing confectioners, I am offering the manufacturers a new method in producing a chocolate hand roll that is thoroughly up to date, and will produce a cream center that will be smooth like velvet and will flow next day after being dipped in chocolate.

Bitter sweets when made by the old method with cream of tartar, acetic acid or corn syrup, always have a tendency to

crack the coating after being dipped, and then dry out very hard. Bitter sweets when made by the 20th Century method, when demonstrated, have kept in the very finest condition.

Manufacturing confectioners, when you have once introduced this new method in your plant for producing a bitter sweet chocolate, you have thereby established your chocolate trade, for when they are once tried they are favorably remembered for their delicious eating quality.

CRYSTAL FONDANT

Crystal fondant is used in the manufacture of the 20th Century chocolate hand rolls.

Formula for crystal fondant: Cook on the open fire in a copper kettle, or by steam kettle. Place in a copper kettle 50 lbs. of cane sugar, one-half ounce of powder citric acid, 2 gallons of water.

Cook to 230 degrees in cold weather, or 232 degrees in warm weather. Place your 50 lbs. of sugar in a kettle with the one-half ounce of citric acid and 2 gallons of water; then, when your batch starts to boil, place a cover on the kettle, so that it will steam down the sides of the kettle. That will keep the batch from turning back to sugar. Then place the cooking gauge in the kettle and cook the batch to 232 degrees for hot weather. Now then, pour this cooked syrup in a 10-gallon wooden keg and let stand without any cover until next day, then it is ready to be used in the manufacture of the 20th Century chocolate hand rolls.

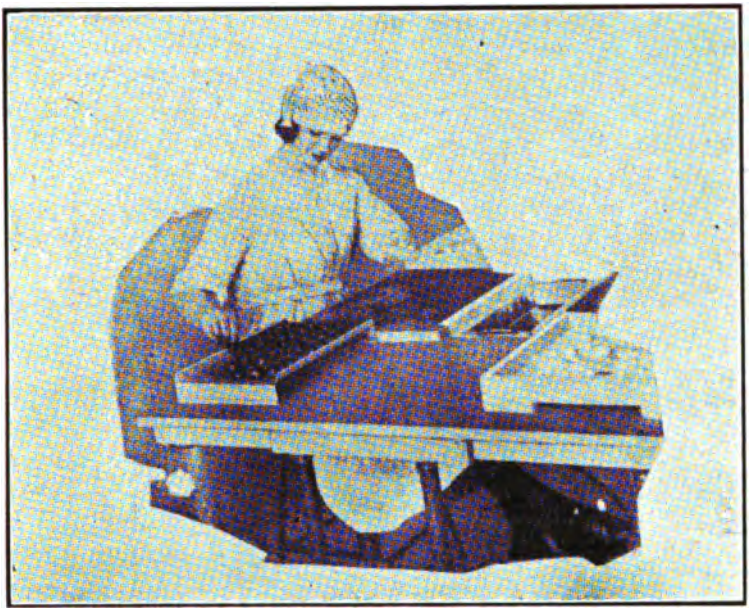
VANILLA FLAVOR BITTER SWEETS

Place in a copper kettle and cook on the open fire or by steam, 25 lbs. of granulated sugar, 5 lbs. of crystal fondant, 1 gallon of water. Cook to 239 degrees for cool weather or 240 degrees for warm weather, or 241 degrees for hot weather. Then pour the batch out on the ball beater that is sprinkled with one-half pint of cold water, and as soon as

the syrup stops bubbling sprinkle the top with two-thirds pint of cold water and turn the water on the cooling table of the machine. Then let the batch cool just long enough on the machine so that when you make an impression into the syrup with your finger the syrup will not run together right away. Then turn off the water from the cooling table of the machine and start to cream the batch to a fondant. Then, when the batch starts to cream, add 2 ounces of vanilla flavor, and when the cream starts to set up like and get dry on the machine, stop the beater and take the batch of fondant cream from the machine, and place the batch on a table or slab that is dusted with corn starch. Now divide the batch into 6 parts and knead up each part until it is soft enough to roll out and cut. Then have a girl or boy to roll out in strips and cut with a palette knife, and have the girls roll them round. When cutting hand rolls use corn starch for dusting the slab, to keep them from sticking. Then place in trays and dip in a bitter sweet coating.

BITTER SWEET COATING

Blend together in chocolate melting kettle 10 lbs. of vanilla sweet coating, 10 lbs. of liquor coating.



Electric Chocolate Dipping Table.
Cutler-Hammer Mfg. Co., Milwaukee, Wis.

LEMON BITTER SWEET CHOCOLATES

1 ounce lemon extract, one-half ounce of powder citric acid.

Add the lemon extract and powder citric acid and a little yellow color when you start to cream the batch to a fondant on the beater, and finish the same as for vanilla flavor batch on hand rolls.

RASPBERRY BITTER SWEET CHOCOLATES

Add 1 ounce of true fruit raspberry flavor, one-half ounce of powder citric acid. Add your raspberry flavor and citric acid with a little red color when you start to cream your batch on the beater.

MAPLE BITTER SWEET CHOCOLATES

Cook in a copper kettle on the open fire or by steam 20 lbs of granulated sugar, 5 lbs. of maple sugar, 5 lbs. of crystal fondant, 1¼ gallons of water. Cook to 239 degrees. Place the maple sugar in your kettle with the water and cook until the maple sugar is dissolved, then add the granulated sugar and the crystal fondant and cook to 239 degrees, then pour out on ball beater and finish the same as for vanilla bitter sweets.

If you want a strong maple color, add some burnt sugar color and 1 ounce of maple flavor.

ASSORTED HAND ROLL CHOCOLATES

Place in a copper kettle and cook on the open fire or by steam 25 lbs. of granulated sugar, 5 lbs. of crystal fondant, 1 gallon of water. Cook to 239 degrees in cool weather or 240 degrees in warm weather.

For extra soft center sprinkle the top of the syrup with 1 pint of cold water when poured out on the ball beating machine. Then finish the same as for vanilla bitter sweet center. Dipped in milk of vanilla sweet coating.

VANILLA AND STRAWBERRY CREAM CENTER

Take one-half of the vanilla batch and color a light red

color on the slab, when you knead up the batch, and add one-half ounce of true fruit strawberry flavor and one-third ounce of citric acid.

When cutting and rolling, take one part of vanilla and one part strawberry and put them together, then roll out in strips and cut. That will give you a two-flavor cream center, which will make a very fine eating hand roll chocolate.

ALMOND PASTE CREAM CENTER

Cook on the open fire or by steam kettle 2 lbs. of crystal fondant, 2 lbs. of sugar, 1½ pints of water. Cook to 255 degrees, then add 2 lbs. of condensed milk and finish cooking the batch to a soft ball when tried in cold water. Then take the kettle from the fire and add 1 lb. of fondant cream and mix thoroughly, then add 2 lbs. of almond paste and 1 ounce of vanilla flavor and mix thoroughly with a paddle, then pour out on a greased slab that is dusted with corn starch. Then, when cool enough to handle, knead up, and it is ready to be used for a center.

Make a batch of vanilla fondant, then divide it into 6 parts, then divide the almond center into 6 parts, then take, when you are ready to roll out and cut, one part of vanilla fondant and flatten it out, then place the almond cream in the center and wrap up. Then roll out into strips and then cut with a palette knife. Then dip in chocolate. This cream center makes a very delicious eating hand roll chocolate.

MAPLE WALNUT PECAN CREAM CENTER

Fondant cream for jacket: 20 lbs. of granulated sugar, 5 lbs. of maple sugar, 5 lbs. of crystal fondant, 1¼ gallons of water. Cook to 239 degrees. Pour out on ball beater and sprinkle with 1 pint of cold water. When cool, cream to a fondant, then add 1 ounce of maple flavor and enough caramel color to make a light maple color.

CENTER FOR MAPLE PECAN CREAM

Cook in a copper kettle on the open fire 2 lbs. of crystal fondant, 2 lbs. of sugar, 1½ pints of water. Cook to 250 degrees, then add 2 lbs. of condensed milk and finish cooking the batch to a soft ball when tried in cold water, then take from the fire and add 1 lb. of fondant cream and mix thoroughly, then add 1½ lbs. of ground pecans and 1 ounce of vanilla flavor and one-half ounce of salt. Mix thoroughly, then pour out on a greased slab that is dusted with corn starch. When cool enough to handle, knead up and use for center in the maple fondant cream batch. Then roll out in strips and cut, then dip in vanilla sweet coating, or milk coating.

CHOCOLATE COOLING ROOM

When dipping the 20th Century chocolate hand rolls the cooling room where the chocolates are being dipped, the temperature of the room should be 66 to 68 degrees to get good results; for, when your chocolate coated goods dry slowly they will have a tendency to be dull, or turn gray, or streak.

INSTRUCTIONS FOR COOKING FONDANT CREAM FOR HAND ROLLS

When cooking fondant cream always see that your kettle has a cover or steamer on when your batch starts to boil. Then keep the cover on the kettle until the batch reaches 230 degrees, so that your batch shows no grains of sugar on the sides of the kettle, because the least grain on the sides of the kettle will cause your batch to turn to sugar on the beater.

When your batch is cooked to 239 degrees, in using the ball beater always have the cold water turned on the cooling table of the machine before the batch of cooked syrup is ready to be poured out on the machine, and sprinkle the

cooling table of the machine with 2 cups of cold water. Then, as soon as you pour the syrup on the machine, sprinkle the top of the syrup with 2 cups of cold water. That keeps the batch from having a sugar crust on top of the cooked syrup. When you press your finger into the syrup, and the impression when made in the syrup will not run together right away, then your batch is ready to start to be creamed to a fondant on the machine.

HIGH GLOSS HARD GOODS COOKED ON THE OPEN FIRE

The 20th Century Method on High Gloss Hard Goods:

Hard goods, when made on the open fire by the 20th Century method, will produce a better gloss, and will have a better keeping quality than can be produced by the use of cream of tartar or corn syrup.

Hard goods, when made by the 20th Century method, spin out very smooth and do not have the tendency to grain like when doctored with cream of tartar for pure sugar goods.

By the use of the 20th Century method on hard goods, your hard goods man can take this new method and produce a very high grade line of high gloss specialties.

The Fan Blast Gas Furnace for Cooking Hard Goods.
The Improved Appliance Co., Brooklyn, N. Y.

HIGH GLOSS TO BE USED IN THE MANUFACTURE OF HARD GOODS

Formula for High Gloss. Place in a copper kettle and cook on the open gas fire 50 lbs. of cane sugar, one-half ounce of powder citric acid, 7 quarts of water. Cook to 232 degrees.

When the batch starts to boil place a cover over the kettle to steam down the sugar, then let the batch cook to 232

degrees. Take from the fire and pour your batch into a tin tub to cool for 1 hour, then pour into a 10-gallon wooden keg, and do not cover the keg until the cooked syrup is cool. Then it is ready to be used in the manufacture of high gloss hard goods. You can make up for stock 500 lbs., as it will keep even during the hot weather.

HIGH GLOSS PURE SUGAR STICK FOR PACKAGES

Formula for Hard Goods: Place in the copper kettle and cook on the open gas fire 25 lbs. of cane sugar, 3 lbs. of high gloss, 1 gallon of water. Cook to 330 degrees for warm weather, 335 degrees for hot weather, 328 degrees for cold weather. Then pour out on a slab that is cool and greased and dusted lightly with corn starch, then fold up the edges as your batch cools on the slab, then flavor the batch and fold up, then color a small piece for the different stripes. Take one-fourth of the batch and keep for a clear jacket, and the rest of the batch pull very light on the pulling hook, but do not twist out the air, leave it in the batch so that the batch will eat brittle and be light in weight.

In striping the batch always inlay the strips in the clear jacket, so that they will show up well when spun out. Then, when you have inlaid the stripes in the clear jacket, wrap the clear jacket around the pulled batch, then spin out so that your sticks will run about 60 sticks to a pound. Then pack in one-pound boxes, assorted flavors, and use a wax paper divider between each layer.

Made in the following flavors:

Mint flavor. Pulled white center with clear jacket, with 4 small red stripes and one wide red stripe.

Lemon flavor. Pulled white center, clear jacket, colored yellow, 4 white small stripes.

Cinnamon flavor. Pulled white center, clear jacket, colored yellow, 4 small red stripes.

Wintergreen flavor. Pulled white center, clear jacket

colored green, 3 small white and 1 large white stripes.

Orange flavor. Pulled white center, clear jacket colored orange, 4 small white stripes.

Anise flavor. Pulled white center, clear jacket colored very dark with velvetine black, 4 small white stripes and 1 large white stripe.

HIGH GLOSS FAIRY CUTS

Made by using a small die cutting machine and packed in 3-ounce jars. Made in four colors, white, pink, yellow and green colors.

Place in a copper kettle and cook on the open fire 16 lbs. of cane sugar, 2 lbs. of high gloss, 3 quarts of water. Cook to 332 degrees. Pour out on a cool slab that is greased, and as soon as the batch starts to cool fold up the edges and flavor, and when cool enough to handle, pull on the hook until the batch shows a brilliant white color, then twist out the air on the hook, and rub down well with your spinning gloves. Then spin out and cut on die cutting machine.

In spinning out goods, as fairy cuuts, sugar cuts, tablets, you should have a sheet of heavy tin on the table so that the goods will cool quickly, and also an electric fan blowing on the goods until the goods are spun out, and as soon as the goods are cool turn off the electric fan, or otherwise the goods will sweat like, when cold. Place in clean trays until you have made the different colors, then mix together. Then pack in glass jars.

Make two batches of white to three batches of colors to make a very fine assortment for the jars.

SUGAR CUTS FOR THE HOLIDAY TRADE

Place in a copper kettle and cook on the open fire 25 lbs. of cane sugar, 3 lbs. of high gloss, 1 gallon of water. Cook to 330 degrees. Pour out on a greased slab; then, when the batch starts to cool, fold up the edges, then flavor the

batch and fold up. Take one-fourth of the batch for clear jacket, then pull the center well and twist out the air on the hook, and bar the batch well on the slab or table, then wrap the clear jacket around the pulled batch, then shape the batch flat, then spin out and cut on the adjustable buttercup cutter, so that the sugar cuts will be very small oblong pieces.

Made in the following flavors:

Mint flavor. Clear jacket, white pulled center.

Lemon flavor. Clear jacket, colored yellow, pulled center.

Orange flavor. Clear jacket, colored orange, pulled center.

Wintergreen flavor. Clear jacket, colored brilliant rose color, pulled white center.

Clove flavor. Clear jacket colored red, pulled white center, 4 small white stripes inlaid in clear jacket.

Pistachio flavor. Clear jacket colored a light green, 4 small white stripes inlaid in the jacket close together, pulled white center.

Cinnamon flavor. Clear jacket colored yellow, 4 small red stripes inlaid in the jacket, pulled white center.

ASSORTED STRAWS

Place in a copper kettle and cook on the open fire 16 lbs. of cane sugar, 2 lbs. of high gloss, 3 quarts of water. Cook to 330 degrees. Pour out on a greased slab. When cool enough pull on the hook until the batch has a brilliant color, then twist out the air on the hook, then rub down well on the spinning board, then flatten out and add 3 lbs. of warm chocolate that is thickened up with a little water, then fold the jacket around the chocolate center, then close up both ends of the batch and spin out the size of a lead pencil and cut on machine.

Machine for Cutting Assorted Straws
E. J. Brach Co., Chicago, Ill.

Peanut Butter Straws: Heat up 3 lbs. of peanut butter for center.

Cocoanut Straws: Melt to the boiling point 2 lbs. of corn syrup and stiffen the corn syrup with fine cocoanut, then flavor with a little lemon flavor.

In making the assortment for straws make them in white, pink, maple and cream colors. Color the jacket just before you are ready to pull the batch on the hook.

ASSORTED WAFERS

Place in copper kettle and cook on the open fire 25 lbs. of cane sugar, 3 lbs. of high gloss, 1 gallon of water. Cook to 332 degrees. Pour out on a greased slab and when the batch starts to cool fold up the edges; then, when cool enough to handle, pull on the hook. Then twist out the air and rub down well on the spinning board. Then flatten out to be used for a jacket.

Centers for Assorted Wafers: Heat in bon bon kettle 4 lbs. of corn syrup to the boiling point, then add enough fine cocoanut so that the center will be stiff enough to keep its shape, then add a little lemon flavor, then place in the center of the batch that is flattened out on the spinning board, then wrap the jacket around the cocoanut center, then close both ends, then shape the batch round, then spin out and cut by continuous cutting machine.

Peanut Butter Center: Use 5 lbs. of peanut butter that is heated warm.

Ground Walnut or Pecan Center: Melt 4 lbs. of corn syrup to the boiling point, then add enough ground walnut or pecan nut meats to make the center stiff enough to hold its shape; or you can use half fine cocoanut and half ground nuts to make the center stiff enough to handle. Add 1 ounce of salt and one-half ounce of vanilla flavor.

Caramel Center: Cook in a copper kettle 3 lbs. of corn syrup, 2 lbs. of sugar, one-quarter lb. of Nuco butter, 1½ lbs. of condensed milk. Cook to stiff ball, or 245 degrees, then add one-half ounce of salt and one-half ounce of vanilla flavor. Then pour out on a greased slab, then do not let the batch get too cold before the jacket is ready. Always make the center before you start to cook the jackets, as the centers must be ready as soon as the batch is poured out on the slab.

Chocolate Center: Dissolve 2 lbs. of Nuco butter in the bon bon kettle. Then add 1½ lbs. of cocoa powder and mix thoroughly, then add enough powder sugar that is sifted to make a stiff paste, so that the center will not run, then place in the center of thejacket and fold around the center, then close both ends, then spin out and cut on machine.

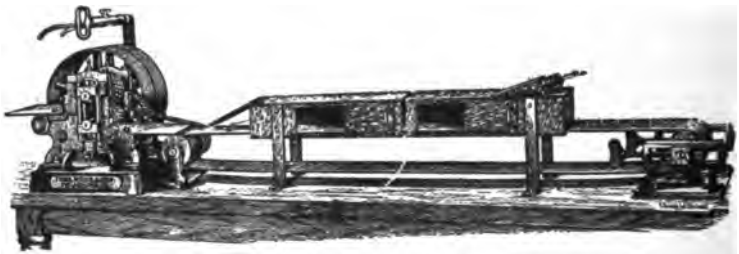
Assorted buttercups can be made the same as for assorted wafers, only they must be cut on the continuous cutter in a pillow shape, in place of the wafer shape.

The jackets for buttercups should be made in the following colors. White pulled jacket, pink pulled jacket, yellow

pulled jacket, maple color pulled jacket colored with burnt sugar, orange pulled jacket, and green pulled jacket and lavender pulled jacket. In making up the assortment for buttercups make 3 batches of white to 4 batches of colors.

PURE SUGAR ASSORTED FRUIT TABLETS

Place in a copper kettle and cook on the open fire 25 lbs. of cane sugar, 3 lbs. of high gloss, 1 gallon of water. Cook to 330 degrees. Pour out on a greased slab; then, when the batch starts to cool, fold up the edges. Then add the different flavors and colors. Then run through the tablet roll machine.



Fruit Tablet Machine.
Thomas Mills Bros., Philadelphia, Pa.

Lemon Fruit Tablets: Add on the slab, when the batch is cool enough to handle, 1 ounce of oil of lemon and 3 ounces of powder citric acid.

Orange Fruit Tablets. 1 ounce of oil of orange, 3 ounces of citric acid. Color the batch a light shade of orange.

Raspberry Fruit Tablets: 1 ounce of true fruit raspberry flavor, 3 ounces of citric acid. Color the batch a light red color.

Lime Fruit Tablets: Two-thirds ounce of oil of lime, 3 ounces of citric acid. Color the batch a light green color.

THE 20TH CENTURY MIX

Place in a copper kettle and cook on the open fire 16 lbs.

of cane sugar, 2 lbs. of high gloss, 3 quarts of water. Cook to 330 degrees. Pour out on a greased slab. When cool enough to handle fold up the edges, then flavor and color, then spin out the size of a lead pencil and cut on die cutting maehinc.

Make 4 batches clear, 1 batch flavor with 1 ounce of lemon, and stripe the lemon batch with 6 small white stripes divided around the batch.

Orange flavor. Colored a light orange shade and striped with 6 small white stripes.

Anise flavor. Colored with brilliant rose color and stripe with 6 small white stripes.

Wintergreen flavor. Colored a light green and striped with 6 small white stripes.

Peppermint flavor. Pulled white body with 6 small red stripes around the batch.

Cinnamon flavor. Pulled white body, yellow jacket, 6 small red stripes around the batch.

This mix, when made in the small kiss cutters on the ball machine, makes a very high grade jar mix.

PARTY STICK, OR OPERA STICK

Place in a copper kettle and cook on the open fire 16 lbs. of cane sugar, 2 lbs. of high gloss, 3 quarts of water. Cook to 330 degrees. Pour out on a greased slab; then, when cool enough to handle, fold up the edges, then flavor and color the different stripes that are to be used for the different flavors. When spinning out the party stick spin the stick out the size of a slate pencil, for the round stick. When making the round party-stick the different flavors are striped. Where the twist party sticks are spun out in a three-cornered shape or triangle shape, and the twist stick are plain colors, white, pink, yellow, lavender and green.

The round party stick is striped in the following ways:

Mint stick stripe, use 1 wide red stripe and 4 small red stripes.

Lemon stick, use 1 wide white stripe and 4 small white stripes on a clear body.

Clove stick, pulled white body, red jacket, striped with 4 small white stripes.

Wintergreen stick, use 1 wide white stripe and 3 small white stripes on a clear green body.

Cinnamon stick, use 1 wide red stripe and 3 small red stripes on a yellow jacket, with a pulled white center.

In cutting the stick after it is spun out on the table, cut the sticks with the candy shears by using a measuring stick the size of the jars that you are to pack the sticks in, then fill the top of the jar with a sheet of wax paper crumpled up, then place the cover on the jar tight.

PEANUT PUFFS

Place in a copper kettle and cook on the open fire 16 lbs. of cane sugar, 2 lbs. of high gloss, 3 quarts of water. Cook to 330 degrees, then add 1 pint of molasses and stir the batch when you add the molasses. Then cook to 330 degrees. Pour out on a greased slab, and when your batch cools, fold up the edges. When cool enough to handle pull two-thirds of the batch on the hook and leave the rest of the batch clear for jacket and place on the spinning board, then pull the two-thirds of the batch and twist out all the air, then flatten the pulled batch out on the spinning board, then place in the center of the batch 5 lbs. of warm peanut butter that is stiffened up with some powder sugar, so that it is not runny like. Then fold the pulled batch around the peanut butter and close both ends. Then stretch out about 4 feet on the table, then fold up and stretch out again until you have folded up 5 times, then shape the batch round and place the clear jacket around the peanut butter batch, then spin out round and cut with buttercup cutter or continuous cutter.

In using the buttercup cutter cut them with a quick mo-

tion, so that the ends will open after they are cut.

By adding 2 ounces of soda in the batch on the slab it will make the peanut puff eat very crisp. Do not use the soda in the clear jacket, only in the part that is to be pulled on the hook, and the soda must be worked in the batch while hot on the slab.

CREAM OF TARTAR USED IN THE MANUFACTURE OF HARD GOODS

Use 1 teaspoonful of cream of tartar to 25 lbs. of cane sugar. Use 1 gallon of water to every 25 lbs. of sugar in cooking hard goods with cream of tartar. Use two-thirds teaspoonful of cream of tartar for clear drops or tablets.

When using cream of tartar in hard goods dissolve the cream of tartar in a glass of water.

In cooking hard goods which contain cream of tartar used as a doctor, cook the pulled batches to 325 degrees, and the clear batches to 330 degrees.

When using cream of tartar for hard goods always use a cold greased slab for pouring out the batch on, or otherwise if poured out on a warm slab the batch will start to grain and cannot be used for stick candy.

In using too much cream of tartar in hard goods your goods will get sticky and soft.

GLUCOSE USED IN THE MANUFACTURE OF HARD GOODS ON THE OPEN FIRE

Glucose, the sugar of starch, is the product secured by the change of cereal starch through acidulated water. All starchy matter can be allowed for this manufacture. Glucose, or corn starch are found in the trades under two distinct forms, a solid considered under the name of lumps or thick glucose, and in the syrup form described under the name of crystal glucose or corn syrup, and is sold to the trade

as 43 and 45 glucose or corn syrup.

The wholesale and retail confectioners prefer the corn syrup testing 43 degrees on syrup gauge, where the chewing gum manufacturers prefer the corn syrup testing 45 degrees on the syrup gauge.

In the manufacture of stick candy use 6 lbs. of corn syrup to 25 lbs of cane sugar. Cooked at 310 degrees for pulled goods, 312 degrees for clear goods.

For Chocolate coated hard goods, as chips, use 8 lbs. of corn syrup to 25 lbs. of sugar. Cooked to 300 degrees.

For broken mix or holiday mix, use 10 lbs. of corn syrup to 25 lbs. of sugar. Cooked to 285 to 290 degrees for pulled goods.

For wrapped stick candy, use 12 lbs. of corn syrup to 25 lbs. of sugar. Cooked to 300 degrees for pulled stick.

For horehound drops or tablets, use 5 lbs. of corn syhup to 25 lbs. of sugar. Cooked to 312 degrees.

For hard goods casted in starch, use 7 lbs of corn syrup to 14 lbs. of sugar. Cooked to 290 degrees.

For glaze dipped goods, use 3 lbs. of corn syrup to 7 lbs. of sugar. Cooked to 300 degrees.

For peanut bar, use 4 lbs. of corn syrup to 6 lbs. of sugar.

In cooking hard goods that are cooked to 300 degrees or more, use cane sugar only; For low boil goods use beet sugar.

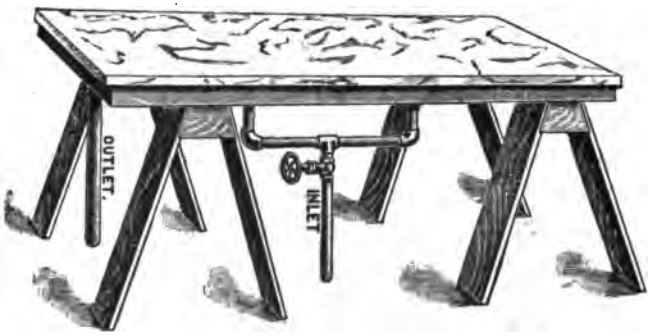
STAND UP CARAMELS, MADE ON THE OPEN FIRE WITH PORTABLE MIXER

Portable Fire Mixer for Cooking Stand Up Caramels.
Savage Bros. Co., Chicago, Ill.

PLAIN VANILLA CARAMEL

Place in copper kettle and cook with portable fire mixer 5 lbs. of corn syrup, 6 lbs. of sugar, 1 lb. of Nuco butter, one-half gallon of 20 per cent cream. Cook to soft ball, then add 7 lbs of sweetened condensed milk that contains 7 per cent of butter fat. Then cook to stiff ball when tried in cold water. Then add 1 ounce of vanilla flavor and 1 ounce of salt. When you add the condensed milk do not use too

strong a fire on the kettle, or the batch will scorch on the bottom of the kettle. Then pour out on a cold water slab that is greased and dusted with flour. When cold, cut with caramel cutter, or on a vertical cutter.



Cold Water Slab for Cooling the Caramels. Thomas Mills Bros., Philadelphia, Pa.

VANILLA NUT STAND UP CARAMEL

Place in a copper kettle with the portable mixer 5 lbs. of corn syrup, 6 lbs. of sugar, one-half gallon of 20 per cent cream. Cook to soft ball, then add 1 lb. of Nuco butter and 7 lbs. of sweetened condensed milk, and finish cooking the batch to a stiff ball when tried in cold water, then add 2 lbs. of almonds, 1 ounce of salt and 1 ounce of vanilla flavor. Pour out on the cooling slab with rods five-eighths inch high. When cold cut in squares on the machine.

CHOCOLATE PLAIN STAND UP CARAMEL

Place in copper kettle and cook with the portable fire mixer 5 lbs. of corn syrup, 5 lbs. of sugar, one-half gallon of 20 per cent cream, 1 lb. of Nuco butter. Cook to soft ball, then add 6 lbs. of condensed sweetened milk, then cook to stiff ball when tried in cold water. Then add 2 lbs. of liquor chocolate that is cut up fine, and 1 ounce of vanilla flavor and 1 ounce of salt. Pour out on cold water slab that

is greased and dusted with flour. Then spread out between rods five-eighths inch high. When cold cut by machine.

CHOCOLATE NUT STAND UP CARAMEL

Make the same as the chocolate plain caramel, then add 2 lbs. of almonds or walnuts when the batch is cooked to a stiff ball when tried in cold water.

STRAWBERRY FLAVOR STAND UP CARAMEL

Place in a copper kettle and cook with the portable fire mixer 5 lbs. of corn syrup, 6 lbs. of sugar, one-half gallon of 20 per cent cream, 1 lb. of Nuco butter. Cook to soft ball, then add 7 lbs. of sweetened condensed milk, then cook to a stiff ball when tried in cold water, then add 1 ounce of true fruit strawberry flavor and one-half ounce of citric acid, and color the batch a strawberry red color. Then pour out on the cold water slab between five-eighths inch rods. When cool cut in caramels.

VANILLA CREAMED CENTER STAND UP CARAMELS

Caramel part for top and bottom:

Place in a copper kettle 5 lbs. of corn syrup. 5 lbs. of sugar, one-half gallon of 20 per cent cream, 1 lb. of Nuco butter. Cook to a soft ball, then add 6 lbs. of 7 per cent sweetened condensed milk. Then finish cooking the batch to a stiff ball when tried in cold water, then add 1 ounce of vanilla flavor and 1 ounce of salt. Then pour out on a greased slab and spread the batch thin.

Now cook the center part. Place in a copper kettle and cook on the gas furnace 4 lbs. of sugar, 3 lbs. of corn syrup, 1½ pints of water, 12 ounces of Nuco butter. Cook to 245 degrees. Take from the fire and add 2½ lbs. of fondant cream, then mix thoroughly with paddle. Then add 1½ lbs. of special nougat fondant and mix thoroughly. Then add

1 ounce of vanilla flavor, then place the batch back on the fire and heat the bottom of the kettle, then stir the batch with a paddle, then pour out on a greased slab that is dusted with corn starch. Then let it set like on the slab. Then take a scraper and form the batch up into a lump. Then, when the batch gets cold enough to knead up with your hands, take and flatten out the cream on half of the caramel batch that is on the slab. Then fold the other half of the caramel over the cream center. Then roll down to five-eighths inch thick. Let stand over night, then cut into caramels.

FRUIT STAND UP CARAMEL

Place in a copper kettle and cook with the portable fire mixer 5 lbs. of corn syrup, 6 lbs. of sugar, one-half gallon of cream. Cook to a soft ball, then add 1 lb. of Nuco butter and 7 lbs. of condensed milk sweetened, then cook the batch to a stiff ball when tried in cold water, then add 2 lbs. of glazed cherries, 1 lb. of pineapple pieces and 1 lb. of bleached Sultana raisins. Then pour out on the cold water slab that is greased and dusted with flour. When cold cut in caramels.

CARAMEL ROLL

Center part for caramel roll: Place in a copper kettle and cook on the open fire 4 lbs. of sugar, 3 lbs. of corn syrup, 1½ pints of water, 12 ounces of Nuco butter. Cook to 247 degrees. Take from the fire and add 3 lbs. of fondant cream and mix thoroughly, then add 1½ lbs. of special nougat fondant, then add 1 ounce of vanilla flavor and mix thoroughly. Then place on the fire and heat the bottom of the kettle and mix thoroughly, then pour out on a greased slab that is dusted with flour, then let it set like on the slab, then take a scraper and form the batch up in a pile; then, when the batch gets cool enough to handle, knead up well with your hands, then it is ready to be used for the cara-

mel center.

Caramel jacket part: Place in a copper kettle and cook with the portable fire mixer 5 lbs. of corn syrup, 5 lbs of sugar, 1 lb. of Nuco butter, 6 lbs. of sweetened condensed milk. Cook to stiff ball, then add 1 ounce of vanilla flavor and 1 ounce of salt. Then pour out on a cool slab that is greased very light and dusted with a little flour. Then, as soon as the batch gets cool enough to handle, so that the caramel will keep its shape, flatten out the cream batch on the caramel that is spread out thin. Then roll up like a jelly roll. Then roll and stretch out in strips in between iron rods until the caramel is cool enough to hold its shape, then cut in slices.

STAND UP CARAMELS FOR HOT WEATHER

Place in a copper kettle and cook with portable fire mixer 5 lbs. of corn syrup, 5 lbs. of sugar, 1 gallon of cream, 1 lb. of Nuco butter. Cook to a stiff ball, then add 6 lbs. of sweetened condensed milk, then finish cooking the batch to a light crack. Then turn out the gas on the furnace and add 3 lbs. of short fondant cream, then mix thoroughly, then add 1 ounce of salt and 1 ounce of vanilla flavor. Then mix thoroughly for 5 minutes with mixer, then pour out on trays 24x36 inches, lined with Kraft paper 24x36 inches, with five-eighth inch rods on the tray. The trays should have end cleats 1½ inches high and the trays should be made of three-quarter inch boards.

Every retail shop should have at least one dozen of these trays made up, as they can be used for nougat work, fudge work and summer caramels.

Then, after you have poured the batch out on the tray and the batch has been on the tray for 30 minutes, take and dissolve 2 ounces of gelatine in 6 ounces of water, then glaze the top of the caramel batch with this gelatine water, then let the batch stand over night on the tray; then, next day,

turn the batch over and soak the paper with a wet cloth, then peel the paper from the batch, then dust the bottom of the batch where you have taken off the paper, with a little starch, and use a bench brush for dusting on the starch. Then let stand until dry, then take and cut the batch in strips and rip on the nougat cutter. Then have a boy to cut them in squares, then let dry over night. Then they are ready for the counter.

Vanilla Nut Stand Up Caramel for Hot Weather: Use 2½ lbs. of almonds to the vanilla batch.

Chocolate Stand Up Caramel for Hot Weather. Use 2 lbs. of liquor chocolate for the plain and 2½ lbs. of almonds for the chocolate nut caramel.

Strawberry Stand Up Caramel for Hot Weather: Use 1 ounce of true fruit strawberry flavor and one-half ounce of citric acid, and color the batch a red color when you add the fondant cream to the batch.

Cocoanut Stand Up Caramel for Hot Weather: Use 2 lbs. of shredded cocoanut and 1 ounce of vanilla flavor and 1 ounce of salt.

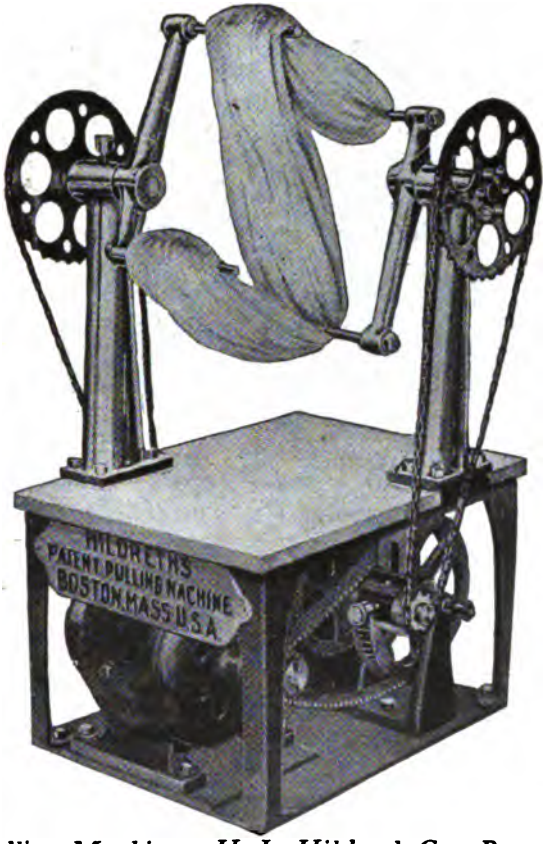
WRAPPED KISSES FOR THE RETAIL CONFECTIONER

The retail confectioner can build up a great business on wrapped candy kisses, by using the up-to-date methods in his display window for turning out the candy wrapped kisses.

Think of the advantage it will give you in your city by specializing on wrapped candy kisses with the different machines used in the manufacture of wrapped kisses, as the pulling machine in operation pulling a batch of taffy in your display window, and also the kiss wrapping machine in operation wrapping the candy kisses in your display window. You will find the advertising feature of these machines showing them in operation in your window is very valuable in making sales, and is sure to attract crowds of people passing your store.

CREAM TAFFY WRAPPED KISSES

Place in a copper kettle and cook on the open gas furnace 7 lbs. of corn syrup. 5 lbs. of sugar, 1 quart of water, 8 ounces of Nuco butter. Cook to 260 degrees, then add 1 pint of 20 per cent sweet cream and cook to a very light crack when tried in cold water. Then pour out on a greased slab, then add one-half ounce of vanilla flavor and one-half ounce of salt. Then fold up, and when cold enough to handle place on the pulling machine and pull very light.



Taffy Pulling Machine. H. L. Hildreth Co., Boston, Mass.

Then take part of the batch from the pulling machine and cool on the marble slab. Then, when cool enough to hold its shape, place on the spinning table of the wrapping machine and feed the wrapping machine and wrap in white wax paper.

Machine for Cutting and Wrapping Candy Kisses. Package Machinery Co., Springfield, Mass.

MOLASSES CREAM TAFFY WRAPPED KISSES

Place in a copper kettle and cook on the gas furnace 5 lbs. of sugar, 7 lbs. of corn syrup, 1½ pints of water, 8 ounces of Nuco butter. Cook to 260 degrees. Add 1 pint of molasses and 1 pint of 20 per cent cream and stir the batch continuously when you add the molasses and cream. Then cook the batch to a very light crack when tried in cold water, then add 1 ounce of vanilla flavor and one-half ounce of salt. Then pour out on a greased marble slab. When

cold enough to handle place on pulling machine and pull very light, then wrap on machine in yellow wrappers.

STRAWBERRY CREAM TAFFY WRAPPED KISSES

Place in a copper kettle and cook on the open fire 5 lbs. of sugar, 7 lbs. of corn syrup, 8 ounces of Nuco butter, 1½ pints of water. Cook to 260 degrees, then add 1 pint of 20 per cent cream, and stir your batch when you add the cream, and finish cooking the batch to a very light crack when tried in cold water. Then add 1 ounce of true fruit flavor, then pour out on a greased slab. When cold enough to handle, add one-quarter ounce of citric acid and mix thoroughly into the batch. Then color with brilliant rose color a light strawberry color. Then place on the pulling machine and pull very light. Then place on spinning board of wrapping machine and cut and wrap by the machine in pink wrappers.

SALT WATER CREAM TAFFY

Place in a copper kettle and cook on the open fire 5 lbs. of sugar, 7 lbs. of corn syrup, 8 ounces of Nuco butter, 1½ pints of water. Cook to 260 degrees. Then add 1 pint of 20 per cent cream, then stir the batch continuously and finish cooking the batch to a very light crack when tried in cold water. Pour out on a greased slab, then add 1 ounce of vanilla flavor and 1½ ounces of salt. Then fold the salt and the vanilla in the batch thoroughly; then, when cool enough to handle, place on the pulling machine and pull the batch very light. Then cut and wrap by wrapping machine in white wax papers.

PEANUT BUTTER TAFFY KISSES

Place 3 lbs. of peanut butter in a bon bon kettle and mix in enough 4 X powder sugar to make the peanut butter have a stiff body, then add 1 ounce of salt and mix thoroughly. Then it is ready to be used for center.

Now cook the jacket. Place in a copper kettle and cook on the open fire 5 lbs. of sugar, 7 lbs. of corn syrup, 1½ pints of water, 8 ounces of Nuco butter. Cook to 260 degrees, then add 1 pint of 20 per cent cream and finish cooking the batch to a very light crack when tried in cold water, then pour out on a greased slab, then add a little caramel color or burnt sugar color to color the batch a light maple color, then add 1 ounce of vanilla flavor and 1 ounce of salt and mix in thoroughly on the slab. Then, when cold enough to handle, pull very light on the pulling machine, then take from the pulling machine and let the batch get cool on the slab, then flatten the batch out and place the peanut butter in the center and fold the batch around the peanut butter. Then close both ends of the batch, then place the batch on the spinning table of the wrapping machine and spin out and feed the wrapping machine. Then wrap in chocolate wax paper wrappers.

CREAM DIPPED BON BONS

GLAZE CREAM FONDANT FOR DIPPING BON BON CREAM CENTERS

Place in a copper kettle and cook on the open fire 40 lbs. of cane sugar, 1 2-3 ounces of acetic acid No. 8 only; 1 ounce gum solution, 7 quarts of water. Cook to 242 degrees for cool weather or 243 degrees for warm weather.

Pour out on ball cream beater and sprinkle the top of the batch with 12 ounces of gelatine solution. When the syrup will hold an impression turn the water off from the cooling table and start to cream to a fondant. Then it is ready to dip with.

GUM ARABIC SOLUTION FOR GLAZE CREAM FONDANT

Soak over night in a glass jar 4 ounces of powder gum arabic in 1 pint of water. In the morning it will be thoroughly dissolved.

Gelatine solution to be used for sprinkling the top of the batch after it is poured out on ball beater.

When you start to cook your batch dissolve 2 ounces of powder gelatine in 12 ounces of water and let it cool by the time the batch is cooked, and when the batch is poured out on the ball beater use this gelatine solution to sprinkle the top of the batch in place of cold water.

Sprinkle the cooling table of the machine with 2 cups of cold water before you pour the batch out on the machine, then use the gelatine solution for sprinkling the top of the syrup.

CREAM FONDANT FOR BON BON CENTERS TO BE CASTED IN STARCH

Place in a copper kettle and cook on the open fire 40 lbs. of cane sugar, 12 lbs. of corn syrup, 1½ gallons of water. Cook to 238 degrees. Then pour out on ball cream beater that is sprinkled with 2 cups of cold water, then sprinkle the top of the batch with 2 cups of cold water. When the syrup will hold an impression start to cream to a fondant. Then it is ready to be used for bon bon centers.

Vanilla Cream Center: Place 10 lbs. of fondant cream in a copper kettle, then place the kettle on the fire and melt down thin enough to cast. Then add 1 lb. of special fondant cream and 1 ounce of vanilla flavor. Mix thoroughly and heat so that the cream will be thin enough to cast with a 5-spout runner. Then let stand in starch over night. Then, next day, take out of starch and dip in glaze fondant cream.

Bon Bon Dipping Table.

In dipping bon bons place 5 lbs. of the glaze dipping cream in the bon bon kettle, then heat the cream thin enough so that you can dip the cream with a bon bon dipping fork. Take and drop one center at a time in the melted fondant and then dip the center out with the bon bon dipping fork, then place the center on trays lined with white oil cloth or heavy wax paper, and after you have dipped about 6 centers try to lift off the first center, and if the center leaves the oil cloth or wax paper that it is dipped on, the cream is heated hot enough. If the bon bon does not leave the oil cloth or wax paper your cream is not heated enough, and your bon bons will shrink after being dipped; that is, the cream on the center will shrivel up after standing for any length of time. After you have dipped with the cream and you find that the cream is getting too thick, do not put too much heat on the cream; add a little gum arabic solution and use the gum solution for thinning the cream.

When you overheat the glaze dipping cream, the cream on the bon bons will lose their gloss right away after being dipped. The gum arabic solution is used to hold the gloss, but if the crea mis overheated so that it has started to turn to sugar in the dipping kettle, do not try to dip with the

cream; put in a fresh batch of cream and start over, melting another batch of cream, as the cream is nothing but pure sugar it can be used the same as sugar in making other different kinds of candy that are cooked low. Do not use this scrap on stick candy or high cooked goods.

STRAWBERRY CREAM CENTER

Place 10 lbs. of fondant cream in a copper kettle and heat thin enough to cast, then add 1 lb. of special fondant and 1 ounce of strawberry true fruit flavor, and color the center a light pink. Then cast in starch. Dip in a pink glaze fondant.

CHERRY CREAM CENTER

Place 10 lbs. of fondant cream in a copper kettle and heat thin enough to cast, then add 1 lb. of special fondant, then cast in round molds that have a glazed cherry dropped in each impression. Have the girls drop the cherries into the starch impressions, then cast the fondant on top of the cherries in the molds. Do not use Maraschino dipping cherries for bon bon work, use only the glazed Maraschino cherry for bon bon work. Dip in white and pink glaze fondant.

MAPLE WALNUT CREAM CENTER

Place 10 lbs. of fondant cream in a copper kettle and heat thin enough to cast, then add 1 lb. of special fondant and mix thoroughly. Then cast in a flat oval shaped mold, and have a whole or half walnut dropped in each mold, then cast on top of walnut with a 5-spout runner. You can make a maple fondant, or flavor the fondant with maple flavor, and color with burnt sugar color. Dip in a maple color glaze fondant.

FILBERT CREAM CENTER

Place 10 lbs. of fondant cream in a copper kettle and

heat thin enough to cast, then add 1 lb. of special fondant and mix thoroughly, then cast in starch with filberts dropped in the molds. Then dip in white or orange glaze fondant.

LEMON CREAM CENTER

Place 10 lbs. of fondant cream in a copper kettle and heat thin enough to cast, then add 1 lb. of special fondant and mix thoroughly. Then add one-quarter ounce of lemon flavor and color the cream a very light yellow color. Then dip in yellow glaze fondant and top with glaze pineapple.

ORANGE CREAM CENTER

Place 10 lbs. of fondant cream in a copper kettle and heat thin enough to cast, then add 1 lb. of special fondant. Then mix thoroughly, then add one-half ounce of orange flavor and color the cream a light orange color. Then dip in an orange glaze fondant and top with a small piece of glazed cherry.

PECAN CREAM CENTER

Place 10 lbs. of maple fondant cream in a copper kettle, then heat thin enough to cast, then add 1 lb. of special fondant and mix thoroughly. Then cast in starch with pecans dropped in the molds, then dip in maple glaze fondant; or you can make the center with plain fondant and top with a whole pecan half.

ALMOND PASTE CENTER

Place 8 lbs. of fondant cream in a copper kettle and heat thin enough to cast, then add 2 lbs. of almond paste and mix thoroughly. Then add 1 lb. of special fondant and mix and heat the cream thin enough so that you can cast with a 5-spout runner. Then dip in a light green glaze fondant and top with a pistachio nut.

APRICOT JELLY CENTER

Soak for 1 hour 5 ounces of Jap gelatine in 1 gallon of

water, then place in a copper kettle and cook with the portable fire mixer until the Jap gelatine is thoroughly dissolved, then add 10 lbs. of sugar, 7 lbs. of corn syrup and cook until the jelly strings from a palette knife, then pour out in a kettle to cool.

Now cook on the fire in a copper kettle one-half gallon of apricot pulp that has been rubbed through a sieve, with 3 lbs. of sugar; then cook the apricot batch until it drops in small sheets from a paddle, then mix this apricot jelly with the batch of Jap jelly, then cast in starch, and use a drop shape mold. Dip in yellow glaze fondant.

COCOANUT GLAZE BON BONS

Made in white, pink, yellow and orange colors.

Center for cocoanut bon bons: Place 10 lbs. of corn syrup in a copper kettle and heat the corn syrup to the boiling point, then add 1 ounce of vanilla flavor and add 8 lbs. of fine cocoanut, and when adding the cocoanut mix the cocoanut thoroughly, then pour out on a greased slab that is dusted heavily with flour. Then roll down to one-half inch thick; then, when cold, feed through cocoanut ball machines, or cut them in squares on caramel machine, and then have girls roll them rouund. Cocoanut bon bons that are made for the wholesale trade should be crystallized and should be made by the cocoanut ball machine. When made for the retail trade dip in a glaze fondant, and do not crystallize them.

FIG CENTER

Place 8 lbs of corn syrup in a copper kettle, then bring the corn syrup to a good boil, then add 4 lbs. of ground figs. Then add enouguh fine cocoanut to make a stiff body, or about 8 lbs; then dump out on a greased slab that is dusted heavily with flour, then roll down to one-half inch thick; then, when cold, cut in squares, then dip in maple glaze fondant.

CREAM GLAZE PATTIES, OR WAFERS

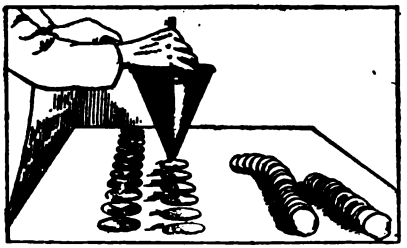
Glaze fondant cream for patties:

Place in a copper kettle and cook on the open fire 40 lbs. of cane sugar, 2 ounces of acetic acid, No. 8 only; 7 quarts of water. Cook to 242 degrees in cool weather, 243 in warm weather. Pour out on ball cream beater and sprinkle the top of the batch with 2 ounces of gelatine dissolved in 12 ounces of water. When cool cream to a fondant. Then it is ready to dip with.

CREAM PATTIES

Place 5 lbs. of glaze fondant in the bon bon kettle and heat the cream thin enough so that it can be casted with a funnel dropper, then add one-quarter ounce of oil of peppermint and mix thoroughly. Then pour in funnel dropper and drop on trays lined with wax paper. Use the heavy wax paper for dropping the wafers on. Never drop wafers of patties on a marble or steel slab lined with wax paper. Have some trays made 24x36 inches, the size of the standard size sheets of wax paper, and as soon as you have run out one tray of wafers, have a girl turn the wafers over. That will keep the top of the wafers from spotting.

Make the cream glaze wafers in white color, flavor with peppermint; yellow color, and flavor with lemon flavor; pink color, and flavor with wintergreen flavor; chocolate color, color and flavor with liquor chocolate cut up fine, and to 5 lbs. of glaze fondant use 12 ounces of liquor chocolate; and as the chocolate will stiffen the cream, thin the cream down with a gelatine solution made with 2 ounces of gelatine to 12 ounces of water. Only use enough of the solution to thin the fondant so that it is thin enough to drop with the funnel dropper.



Cream Wafer Dropper for Dropping Two or Three Colors. Thomas Mills Bros., Philadelphia, Pa.

This patent cream wafer dropper is used with great success in running 2 or 3 color cream wafers, in which the colors are exquisitely blended together. This patent cream wafer dropper can also be used in dropping butter scotch wafers.

BUTTER SCOTCH WAFERS

Place in a copper kettle and cook on the open fire 7 lbs. of sugar, 3 lbs. of corn syrup, 1 quart of water. Cook to 295 degrees, then add 8 ounces of creamery butter, 1 ounce of salt and a little burnt sugar color, and stir the batch when you add the butter, and as soon as the butter is cooked thoroughly through the syrup, take from the fire. Then pour in the funnel dropper and fill the dropper two-thirds full, then drop out on a greased slab, and as soon as you have run the batch out take a French knife and loosen the wafers from the slab. When cold pack in jars.

GLAZE PATTIES

In making glaze patties you must have about 24 to 36 frames made 10½x14 inches, with 3¼ inch circles, and each frame should contain 12 of these 3¼ inch circles, and the circles and frames should only be two-eighth inch high, and made of one-sixteenth inch sheet iron.

FORMULA FOR GLAZE PATTIES

Peanut glaze patties: Place in a copper kettle and cook on the open fire 4 lbs. of sugar, 3 lbs. of corn syrup, 1 quart of water. Cook to 245 degrees, then add 7 lbs. of Spanish No. 1 peanuts and stir the batch continuously until the peanuts are roasted in the syrup a light brown color, then pour out on a greased slab and add 1 ounce of salt, then fold up the batch with a flat rod or a large knife; then, as soon as the batch can be handled with the hands, cut off small pieces from the batch. Then have a girl or boy to press them out in the circles on the slab. Then fill all the frames with patties; then, as soon as the patties will keep their shape, take the patties from the circles. When cold they are ready to be sold over the counter.

Walnut patties: Place in a copper kettle 5 lbs. of sugar, 3 lbs. of corn syrup, 1 quart of water. Cook to 290 degrees, then add 3½ lbs. of walnut pieces and mix thoroughly on the fire, then pour out on a greased slab, then add 1 ounce of salt and fold up 5 times with a rod or knife. Then cut off small pieces and place in the circles, then press them out in shape.

Brazil patties: Place in a copper kettle and cook on the fire 5 lbs. of sugar, 3 lbs. of corn syrup, 1 quart of water. Cook to 290 legrees, then add 3½ lbs. of brazil pieces cut up with a knife in small pieces. Then pour out on a greased slab and finish like the peanut glaze patties.

Pecan glaze patties. Place in a copper kettle and cook on the open fire 5 lbs. of sugar, 3 lbs. of corn syrup, 1 quart of water. Cook to 300 degrees, then add 3 lbs. of pecan pieces and mix thoroughly. Then pour out on a greased slab. Then add 1 ounce of salt and fold up in the batch, then finish like for peanut patties.

Filbert glaze patties: Place in a copper kettle and cook on the open fire 5 lbs. of sugar, 3 lbs. of corn syrup, 1 quart of water. Cook to 300 degrees, then add 3½ lbs. of filberts.

Then pour out on a greased slab, then add 1 ounce of salt, then fold up the batch and finish the same as for peanut patties.

COCOANUT PEANUT FLAKE

Place in a copper kettle and cook on the open fire 4 lbs. of sugar, 3 lbs. of corn syrup, 1 quart of water. Cook to 245 degrees. Then add 2 lbs. of Spanish No. 1 peanuts and roast the peanuts in the syrup a light brown color, then add 2 lbs. of chip cocoanut and mix thoroughly with a paddle, then pour out on a greased slab, then take 2 forks and spread out very thin in flakes.

PEANUT BAR FOR THE COUNTER

Place in a copper kettle and cook on the open fire 4 lbs. of sugar, 3 lbs. of corn syrup, 1 quart of water. Cook to 245 degrees, then add slowly 7 lbs. of Spanish No. 1 peanuts and stir the peanuts in the syrup slowly while roasting; then, when the peanuts are roasted a light brown color, pour out on a greased slab. Then add 1 ounce of salt, then fold the batch up about 5 times on the slab, then roll down with a rolling pin three-eighths inch thick. Then cut in bars 3 inches long and five-eighths inch wide with adjustable cutters.

MAPLE PRALINES

Place in a copper kettle and cook on the open fire 3½ lbs. of No. 10 sugar, 1 lb. of maple sugar, 1 quart of water, 12 ounces of corn syrup. Cook to 236 degrees, then add 2 lbs. of pecan pieces and one-half lb. of fondant cream, then mix thoroughly until the fondant cream is dissolved, then start to spoon out with a large spoon, and use a table knife to cut off the syrup when spooning ont on Kraft paper. Do not use wax paper, use the Kraft paper, and never use the steel slab or marble for spooning out pralines on; use table

or trays lined with Kraft paper. When spooning out use the table knife to spread out the pralines in a round, flat shape.

MAPLE PECAN PATTIES

Place 5 lbs. of glaze cream fondant in the bon bon kettle, then heat the glaze cream thin enough to spoon out, then add enough burnt sugar color to color a light maple color, then add 1 ounce of maple flavor, then add 1 lb. of pecan pieces, then spoon out in glaze patties circles frame and place the frame on trays lined with oil cloth or wax paper, and grease the circles in the frame before you spoon out the fondant in the circles. These maple patties can only be used as counter goods and should be made up fresh every day.

MAPLE FIG PATTIES

Place 5 lbs. of glaze cream fondant in a bon bon kettle, then heat the glaze fondant thin enough so that it can be spooned out, then add 1½ lbs. of figs that have been ground coarse through the food chopper, then add enough burnt sugar color to color the fondant a light maple color, then flavor with 1 ounce of maple flavor, then spoon out in circles on wax paper or oil cloth trays.

MAPLE FLUFFS

Place in a copper kettle and cook on the open fire 4 lbs of sugar, 3 lbs. of corn syrup, 1 lb. of maple sugar, 1½ quarts of water. Cook to 260 degrees, then add 3½ lbs. of sweetened condensed milk and stir the batch continuously when you add the condensed milk, to keep the batch from scorching on the bottom of the kettle. Then cook to a stiff ball, or 245 degrees. Then take from the fire and stir in the batch 3 lbs. of short cream fondant and mix thoroughly, then add 2 lbs. of special nougat fondant, then mix thor-

oughly, then add enough burnt sugar color to color the batch a very light maple color, then add 2 lbs. of pecan pieces, one-half ounce of salt and one-half ounce of maple flavor, then mix thoroughly. Then let the batch stand in the kettle for 30 minutes, then have girls spoon out on trays lined with heavy wax paper. When spooning out the maple fluffs, if they do not hold their shape let the batch stand a little longer in the kettle, then spoon out.

PECAN ROLL

Center for pecan roll: Place in a copper kettle and cook on the open fire with portable mixer 6 lbs. of sugar, 1 lb. of maple sugar, 1 pint of molasses, 4 lbs. of corn syrup, 1½ quarts of water, 1 lb. of Nuco butter. Cook to 250 degrees, then add 4 lbs. of sweetened condensed milk and cook to a stiff ball when tried in cold water. Then take from the fire and add 4 lbs. of short fondant cream and mix thoroughly, then add 2 lbs. of special nougat fondant, then place back on the fire and heat the bottom of the kettle and mix up thoroughly, then pour out on a greased slab that is dusted heavily with flour. Then let set on the slab. Then fold up with a scraper until it is cool enough to knead up with your hands, then place on trays lined with heavy wax paper with rods on the tray 1 inch high. Then let stand until next day, then mark and cut in bars 5 inches long and 1½ inches wide. Then dip in a caramel jacket and roll in pecans.

CARAMEL JACKET FOR PECAN CENTER

Place in a copper kettle and cook with portable fire mixer 4 lbs. of corn syrup, 3 lbs. of sugar, 1 lb. of Nuco butter, 1 quart of water. Cook to 250 degrees, then add 6 lbs. of condensed milk, then cook to a stiff ball when tried in cold water, or 245 degrees. Then add 1 ounce of salt and 1 ounce of vanilla flavor. Then set the kettle on a pail of hot water and take 2 forks and dip the center down into the

caramel batch. Then drop the dipped roll in a tray of pecan pieces or halves, then cover the roll with pecans, then place the dipped pecan rolls between rods so that they will keep their shape. Then let stand until cold, then they can be cut into slices or sold in rolls.

You can add 1½ lbs. of almonds in the cream center, or cherries that are glazed, which will make the roll show up when cut in slices.

CASTED PECAN ROLL

Make a bar shape mold out of plaster paris 2½ inches long and one-half inch square.

Center to be casted in starch: Place 15 lbs. of No. 1 maple fondant in a copper kettle, then heat the maple fondant cream thin enough to cast, then add 1 ounce of maple flavor and 5 lbs. of special nougat fondant, then heat the batch so that it can be casted with a funnel dropper into the bar shape molds in the starch, then let stand over night, then dip in a caramel and roll in pecan pieces.

Caramel part for jacket: Place in a copper kettle and cook with portable fire mixer 4 lbs. of corn syrup, 3 lbs. of sugar, 1 lb. of Nuco butter, 1 quart of water. Cook to 250 degrees, then add 5 lbs. of condensed milk, then cook to a stiff ball when tried in cold water, then add 1 ounce of vanilla flavor and 1 ounce of salt. Then have the girls dip the bars in the caramel. Then roll in pecan pieces. The pecan roll, after being dipped and rolled in pecans, should only weigh 2 ounces.

FRENCH STYLE PECAN ROLL

Center for roll: Cook a batch of caramel 4 lbs. of sugar, 5 lbs. corn syrup, 1 lb. of Nuco butter, 6 lbs. condensed milk. Cook to a stiff ball when tried in cold water, then add 2 lbs. of liquor chocolate that is cuut up fine, and cook until the chocolate is melted, then pour out on a greased slab. When

cold cut up on caramel cutter in small squares, and throw on the slab.

Now cook a batch of nougat. Soak over night 7 ounces of egg albumen in 1 pint of water in a glass jar. Now cook on the open fire in a copper kettle 6 lbs. of sugar, 5 lbs. of corn syrup 1 quart of water. Cook to 260 degrees.

While the batch is cooking beat up the dissolved egg albumen with 1 lb. special fondant in beating machine, and beat the egg albumen and special fondant up very light. Then add the cooked batch and beat very stiff.

Now cook part 2: Cook on the open fire in a copper kettle 6 lbs. of sugar, 4 lbs. of corn syrup, 1 quart of water. Cook to 265 degrees for cool weather or 268 degrees for warm weather. Pour this cooked syrup into the beaten batch and mix thoroughly, then add 1 lb. of Nuco butter and 1 ounce of vanilla flavor and 2 lbs. of almonds and mix thoroughly. Then take this nougat batch and pour out on the carmels that are cut in small squares on the slab. Then, when cool enough to handle with the hands, fold up 4 times. Then place on trays lined with six-eighths inch rods and heavy wax paper. Then, when filling the trays, fill the trays good and full. Then dust the top of the batch with a little corn starch, then place a sheet of heavy wax paper on top of the batch, then place another tray on top and press down with a chocolate case, or some heavy weight. Let stand over night, then cut in strips on nougat cutter, and cut the batch in pieces 5 inches, so that when cut on the nougat machine the strips will be 5 inches long. Then dip in caramel and roll in pecan pieces. When cold cut in slices.

Caramel for dipping: 4 lbs. of corn syrup, 3 lbs. of sugar, 1 lb. Nuco butter, 5 lbs. of condensed milk. Cook to a stiff ball when tried in cold water, then add 1 ounce of salt and 1 ounce of vanilla flavor. Then dip the center in the caramel and roll in pecans.

FRENCH STYLE COUNTER NOUGAT

Soak over night in a glass jar 7 ounces of egg albumen in 1 pint of water. Now make a batch of caramels, 5 lbs. of corn syrup, 4 lbs. of sugar, 1 lb. of Nuco butter, 6 lbs. of condensed milk. Cook to stiff ball when tried in cold water, then add 2 lbs. of liquor chocolate, then add 1 ounce of vanilla flavor, then pour out on a greased slab. When cold cut in small squares, then throw on slab.

Nougat part: Place the dissolved egg albumen in the nougat beating machine with 2 lbs. of special fondant and beat up very light. Now cook in a copper kettle on the open fire 5 lbs. of sugar, 5 lbs. of corn syrup, 1 quart of water. Cook to 260 degrees, then pour into the beaten egg albumen and beat the batch very stiff. Then cook Part 2.: 6 lbs. of sugar, 4 lbs. of corn syrup, 1 quart of water. Cook to 265 degrees for cool weather or 268 degrees for warm weather, and pour this cooked syrup into the beaten batch and mix thoroughly. Then add 1 lb. of short fondant cream and 1 lb. of Nuco butter. Then mix thoroughly, then add 1 lb. of glazed pineapple, 1½ lbs.. of glazed cherries, 1 lb. of almonds. Then pour this nougat batch out on the cut caramels and fold up 4 times, then roll down and place on tray lined with heavy wax paper, and use five-eighth inch rods on the trays. Then place a sheet of wax paper on top of the batch and then place another tray on top of the wax paper and press the batch with some heavy weight. Then let stand over night, then cut in strips on the nougat machine, then cut in oblong pieces with a French knife.

CHERRY FRUIT SHERBET

Place in a copper kettle and cook on the open fire 6 lbs. of sugar, 4 lbs. of corn syrup, 1 quart of water, one-half lb. Nuco butter. Cook to 246 degrees, then take from the fire and add 4 lbs. of short fondant cream and mix thoroughly, then add 2 lbs. of special nougat fondant and color the batch

a light pink color, then add 3 lbs. of glazed cherries, chopped up fine, and one-half ounce of citric acid. Then mix thoroughly, then heat the bottom of the kettle on the fire. Then mix thoroughly, then pour out on a tray lined with heavy wax paper, with one-half inch rods; then, when cool, mark into squares. Then let stand over night. Then it is ready to be sold over the counter.

CHOCOLATE SLICED NOUGAT FOR COUNTER

Soak over night 7 ounces of egg albumen in 1 pint of water. Then make a batch of chocolate caramel and cut in small squares.

Caramel part: Place in copper kettle and cook with portable fire mixer 4½ lbs. of corn syrup and 4 lbs. of sugar, 1 lb. of Nuco butter, 1½ pints of water. Cook to 260 degrees, then add 5 lbs. of condensed milk. Then cook to a stiff ball when tried in cold water. Then add 2 lbs. of liquor chocolate, 1 ounce of vanilla flavor, 1 ounce of salt, then pour out on a greased slab. When cold cut in small squares with caramel cutting machine and throw them on a slab.

Now cook the nougat part. Place in a copper kettle and cook on the open fire 5 lbs. of corn syrup, 5 lbs. of sugar, 1 quart of water. Cook to 260 degrees.

While the batch is cooking place in the nougat beating machine 2 lbs. of special nougat fondant and the dissolved egg albumen and beat the egg albumen up very light and stiff, then add the cooked syrup and beat the batch very stiff.

Now cook Part 2 for nougat: Place in a copper kettle and cook on the open fire 6 lbs. of sugar, 4 lbs of corn syrup, 1 quart of water. Cook to 265 degrees for cool weather, or 268 degrees for hot weather, then pour this cooked syrup into the beaten batch and mix thoroughly, then add 1 lb. of fondant cream and mix through the batch, and 1 lb. of Nuco butter, and mix thoroughly. Then pour this nougat batch out on the cut caramels and fold up 5 times, then roll down

to one-half inch thick. Then let lay on a slab that is dusted with flour, until next day. Then cut in strips on nougat machine 1¼ inches wide, then dip the strips of nougat in thin chocolate, then cut in slices with a French knife.

In cutting nougat work with a French knife, in case the nougat sticks to the knife when cutting, always rub the knife over a wet cloth. That will keep the nougat from sticking to the knife.

OPERA CREAM FOR COUNTER

Place in a copper kettle and cook with portable fire mixer or steam kettle 15 lbs. of sugar, one-half gallon of 20 per cent cream, 1 pint of water, one-half ounce of acetic acid No. 8. Cook to stiff ball, or 244 degrees. Then pour out on ball cream beater, and when the syrup will hold an impression, start to cream to a fondant. Then add 1 ounce of vanilla flavor and one-half ounce of salt. Then, when the batch sets up hard on the beater, stop the beater and knead up on a slab that is dusted with starch, then put on a tray lined with wax paper, and use three-eighths inch rods on the tray. Then mark with a grooved rolling pin, then cut in 1½ inch squares, next morning.

For chocolate opera cream add 2½ lbs. of liquor chocolate.

CHOCOLATE PATTIES

In making chocolate patties you must have at least 24 to 36 frames made 10x14 inches, and the frames should be made of one-sixteenth inch sheet iron and three-eighths inch high, and each frame should contain 12 circles, and each circle should be 3 inches in diameter. Then place the frames on a tray lined with heavy wax dipping paper. These patties must be dipped in the chocolate dipping room, where the temperature of the room must not be over 68 degrees; 66 degrees will give the best results. Now place 15

lbs. of vanilla sweet coating in the chocolate melting tank on the dipping table.

For peanut cluster chocolate patties have the girl add all the roasted peanuts that the chocolate will take on the dipping slab, then fill the circles in the frame with this peanut cluster chocolate, and the clusters should only weigh 2 ounces, and as soon as the chocolate is set firm take the clusters from the circles.

MILK ALMOND CHOCOLATE PATTIES

Place 15 lbs. of milk coating in the chocolate melting tank on the dipping table, then add 4 lbs. of roasted almonds that are crushed with a rolling pin. Then fill the circles so that the milk patties will run 2 ounces.

CHOCOLATE WALNUT PATTIES

Place 10 lbs. of light vanilla sweet coating and 5 lbs. of milk coating in the melting kettle on the dipping table. Then add 3½ lbs. of crushed walnuts in the coating, then dip in the circles and fill the circles so that the walnut patties will weigh 2 ounces.

CHOCOLATE CRUMBLE PATTIES

Place in a copper kettle and cook on the open fire 15 lbs. of sugar, 2 lbs. of crystal fondant for hard goods, 3 quarts of water. Cook to 330 degrees, then add 1 pint of molasses and 12 ounces of creamery butter. Stir the batch when you add the molasses and butter. Then let the molasses boil through the syrup, then pour out on a greased slab, then add 2½ ounces of salt, then fold up the batch, and when cool enough to handle pull two-thirds of the batch on the hook and leave the one-third of the batch for a jacket clear. Then take the pulled part and flatten out on the spinning board, then add 5 lbs. of warm peanut butter and fold the batch around the peanut butter. Then close both ends,

then stretch out 5 feet and fold over like for honey comb, and fold over 5 times. Then take the clear jacket and wrap around the peanut honey comb batch, then spin out round and cut on waffle cutter. Then, when cold, take a rolling pin and crush up.

Now place 15 lbs. of vanilla sweet coating in the melting tank on the dipping table, then add all the crushed peanut crumble that the chocolate will take, then fill the circles so that the patties will weigh 2 ounces.

MILK CREAM CENTER PATTIES

Place in a copper kettle 12 lbs. of No. 1 cream fondant, then heat the fondant hot enough to cast, then add 4 lbs. of special fondant and mix thoroughly, then add 2 ounces of vanilla flavor. Then heat the cream hot enough so that you can cast with a funnel dropper in molds 1½ inches in diameter and one-eighth inch deep. Then let stand in starch until next day, then take out of starch, then they are ready to be used for cream center patties.

Place 8 lbs. of milk coating and 8 lbs. of vanilla light coating in the chocolate melting tank on the dipping table, then add 2 lbs. of ground roasted almonds in the coating, then dip one-third of the circle full of the coating, then drop a cream pattie in the center of the coating, then fill the circle up with the chocolate so that the milk cream pattie will weigh 2 ounces.

SPECIALTIES FOR ST, VALENTINE'S DAY

For the retail confectioner.

Pack chocolate and bon bons in red Valentine heart boxes in 4 ounce box, 8 ounce box and 1 lb. box. Make the bon bons by casting the center in a heart shape mold in starch, then dip in a white glaze fondant and top with a small hard candy heart, colored red and flavored with anise flavor,

HARD CANDY HEARTS MADE IN STARCH

Place in a copper kettle and cook on the open fire 7 lbs. of sugar, 3 lbs. of corn syrup, 1 quart of water. Cook to 290 degrees, then take from the fire and color the batch a red color, then flavor with one-quarter ounce of oil of anise. Then cast in a small heart shape mold in starch, then let stand until cool, then take out of starch and brush the starch from the candy hearts, then take and shine them with Stanalax oil. That will shine them so that the starch will not show on the candy hearts. Place the candy hearts in a sieve, then wet a cloth with Stanalax oil and rub the cloth over the candy hearts. Then place in trays to dry for 30 minutes, then they can be packed or used for topping wafers of bon bons.

Make glaze wafers in a white color. Flavor with mint, then top the wafers with a small hard candy heart.

SPECIALTIES FOR WASHINGTON'S BIRTHDAY

Make a candy cherry tree with cherries on the tree. Make the body of the tree with a small round stick, then make the branches out of stiff wire. Then cover the body and the branches with hard candy colored with burnt sugar and a little red color. Then color some fine cocoanut a light green color, to be used for the stand or bottom of the tree. Then decorate the tree with some artificial small cherries with green leaves. Then make a batch of candy cherries and place a few candy cherries around underneath the tree. Then have some small Easter baskets filled with candy cherries and set them around the tree in the window, and in each basket place 3 small candy hatchets made in a clear and red color. The candy hatchets can be made by casting the hard goods in starch, using a hatchet shape mold.

CANDY CHERRIES TO BE USED FOR BASKETS

Place in a copper kettle and cook on the open fire 16 lbs.

of sugar, 2 lbs. of crystal fondant, 3 quarts of water. Cook to 335 degrees, then pour out on a greased slab. Then, when cool enough to handle, flavor with cherry and 2 ounces of citric acid. Then color two-thirds of the batch a yellow color and pull on the hook, then color the rest of the batch a dark red color, to be used for the jacket. In putting on the jacket use a very thin red jacket on one side of the yellow center, and use a very heavy red jacket on the other side, so that one of the sides of the batch the yellow will show through the red jacket when run through the lemon drop roll.

Make a fairy cut mix on the die cutting machine in white, red and blue colors, then place the mix in the white chocolate bon bon cups. Then pack in a flat box.

Dip Maraschino cherries in a cream fondant, then in chocolate coating, then pack in a flat 8-ounce or 1-lb. box, tied with a red ribbon.

SPECIALTIES FOR ST. PATRICK'S DAY

Make a fairy cut mix of white and green color and cut on a small die cutting machine. Make the white batch pulled body with 6 small green stripes around the batch and flavor with wintergreen. Make the green batch a light, clear green color. Then stripe with 6 small white stripes around the batch. Then flavor with oil of Pistachio flavor. Then mix the two colors together. Then fill white bon bon cups. Then pack in a flat box.

Make a small party stick, a light green color, and stripe the batch with 6 small white stripes. Then cut 3 inches long and spin out the size of a slate pencil. Pack in a flat box, 8 ounces to the box. Tie the box with a green ribbon.

IRISH BUTTER CREAM POTATOES

Place in a copper kettle and cook on the open fire 10 lbs. of sugar, 5 lbs of corn syrup, 1½ quarts of water. Cook

to 250 degrees, then add 10 lbs. of No. 1 fondant cream and mix thoroughly. Then add 3 lbs. of condensed milk, then 2 lbs. of special nougat fondant, then add 1 ounce of vanilla flavor and 1 ounce of salt. Then cast in starch, using a small potato mold. Then let stand over night, then take out of starch, then make a gelatine solution of 1 ounce of gelatine in 14 ounces of water, then dissolve the gelatine, then place the candy potatoes in a small kettle, then give them a wetting of the gelatine solution, then throw them in powder cinnamon, then sieve out, then pack in small baskets.

Make some small green candy baskets from hard candy by shaping the hard candy over a small dish. Then place a small candy handle on the candy basket. To make the candy basket, cut off from the batch a small piece with the candy shears, then roll flat with a rolling pin, then shape over a small dish, then place in front of an electric fan to cool. Use 4 small dishes. While same is cooling the helper can be shaping them on the dishes.

SPECIALTIES FOR EASTER

Make a full assortment of chocolate chickens, roosters, rabbits, from solid chocolate in the chocolate molds. In making the chocolate chickens, roosters and rabbits, place 15 lbs. of chocolate coating in the melting tank on the dipping table, then take the chocolate and cool the chocolate on the cooling slab the same as for dipping centers. Then, when the chocolate is cooled, fill the molds, then let stand until the chocolate sets hard in the molds, then take from molds. Never use grease on the molds. All you have to do with the molds is see that they are clean, then the chocolate will leave the mold when you open the two halves.

By using the egg shape molds you can make the hollow chocolate eggs. Then take a knife and trim the edges, then place the two halves together with some chocolate, then dec-

orate with white icing, or chocolate icing, with decorating tubes.

MAKE A FULL ASSORTMENT OF DECORATED CHOCOLATE CREAM EGGS

Place in a copper kettle and melt down on the fire 50 lbs. of No. 1 fondant cream and heat the cream thin enough to cast, then add 15 lbs. of special nougat fondant and heat the cream thin enough so that it can be casted by runner or funnel dropper. Then add 4 ounces of vanilla flavor, then cast in starch, using the different sizes of egg shape molds, from the 5 cent egg to the $1 size chocolate dipped egg.

Make the eggs with fruit, nuts and cocoanut in the cream, or drop the glazed pineapple or glazed cherries or nuts in the cream. Then leave in starch over night, then dip each half in the 25c and 50c and the $1 size in chocolate. Then, after they are dipped in chocolate, stick the two halves together with chocolate. Then decorate by placing a border around the egg where the two halves are stuck together. In making the large size eggs the cream must be heated good and hot before being casted in starch, or otherwise the cream will not hold its shape when dipped in chocolate.

In making the 10 cent size eggs stick the two halves together before being dipped in chocolate, then have the chocolate dippers make the decoration or splice on the chocolate dipped egg when it is being dipped.

BON BON DIPPED EASTER EGGS

Cream fondant for bon bon Easter eggs: Place in a copper kettle and cook on the open fire 50 lbs. of sugar, 12 lbs. of corn syrup, 7 quarts of water. Cook to 239 degrees. Then pour out on ball cream beater, then sprinkle the top of the batch with 2 cups of cold water. When the syrup will hold an impression, start to cream to a fondant.

Now take and print the egg shape molds in starch. Then

take 25 lbs. of the fondant cream and melt in a copper kettle on the fire, then heat the cream thin enough to cast, then add 4 lbs. of special fondant and 1½ lbs. of fine cocoanut and mix thoroughly. Then heat the cream so that it is thin enough to cast with a 4-spout runner. Then let stand in starch over night, then take and brush off the starch by starch buck or by hand. Then have a little icing heated up and stick the two halves together. When the girls are putting the two halves together have a piece of string in a loop put between the two halves. Then set in trays until the icing sets hard. Then they are ready to be dipped in a glaze fondant cream.

GLAZE FONDANT CREAM FOR DIPPING BON BON EASTER EGGS

Place in a copper kettle and cook on the open fire 40 lbs of cane sugar, 2 ounces of acetic acid, No. 8 only; with 7 quarts of water. Cook to 241 degrees, then pour out on a ball cream beater that is sprinkled with 2 cups of cold water, then sprinkle the top of the syrup with a gelatine solution made with 2 ounces of gelatine in 1 pint of water. Then, when the syrup will hold the impression, cream to a fondant. Then it is ready to be used for dipping the cream eggs. Place 10 lbs. of the glaze fondant in a bon bon melting kettle and heat the cream thin enough so that you can dip the eggs down into the cream. Then have a rack made so that as soon as you dip the eggs down into the fondant you can hang the eggs up by the string on nails to drain, and place a sheet of wax paper underneath the rack to catch the drippings. Then, as soon as the cream sets on the eggs, have the girls take them from the nails and lay them on wax paper in trays.

In thinning down the glaze cream, when dipping, never use water; use a gum arabic solution made with 3 ounces of gum arabic to 1 pint of water.

Make the cream eggs in assorted colors.

For package goods. Pack assorted chocolates in one-half lb., 1 lb. and 2 lbs., lavender fancy boxes, and tie the boxes with lavender ribbon. The decorated eggs should be packed in a lavender box or a white box tied with lavender ribbon, and packed with green shredded wax paper.

SPECIALTIES FOR FOURTH OF JULY

Make stick candy striped with red, white and blue stripes, then spin out the sticks the size of a lead pencil and cut them 3 inches long. Then pack in one-half lb. flat boxes, tied with a red, white and blue ribbon.

Make assorted wrapped kisses wrapped in a red, white and blue kiss wrapper.

Make assorted cream wafers in red, white and blue colors.

SPECIALTIES FOR HOLLOWE'EN

Make nut glazes, as peanut glaze, filbert glaze, pecan glaze, brazil glaze and walnut glaze.

Make an assortment of cream wafers, in orange and chocolate colors.

Make an orange color nougat, then cut in strips on nougat machine, then dip in chocolate and cut in slices.

Make a small party stick, with an orange jacket, and stripe the batch with black stripes, packed in a one-half lb. flat box and tied with a small orange and black ribbon.

Make a fairy cut, colored an orange color body, then striped with 6 small black stripes, then packed in chocolate bon bon cups, then packed in a flat box, tied with an orange ribbon.

For chocolate package goods, pack assorted chocolates and orange cocoanut bon bons in a 1-lb. box. The wrapper of the box should be an orange color, then tie the box with an orange ribbon.

SPECIALTIES FOR CHRISTMAS

Make a full assortment of chocolates, for fancy boxes and baskets. Make a candy house for window display. Make the house out of card board, then decorate the card board with decorating icing made with egg albumen and powder sugar, then sprinkle granulated sugar on the icing so that the icing will show up and glitter like. Make the windows with gelatine transparent paper. Place a small Christmas tree in the bay window.

To represent the snow for driveway, make a batch of snow, or mountain sugar, as it is called. Place in a copper kettle and cook on the open fire 3 lbs. of cane sugar with just enough water to dissolve the sugar. Then cook the batch to 265 degrees, then set from the fire and add one-quarter lb. of decorated icing, made with dissolved egg albumen and powder sugar beaten up very light. Then stir this decorated icing into the cooked syrup with a paddle. Then, when it raises up in the kettle, pour out on a greased slab with 2-inch rods. Then let stand until cold, then it is ready to be broken into pieces to be used for drive way. Then to represent the driveway around the house use powder cocoa.

Make a full assortment of hard goods for the counter as Christmas mix, as sugar cuts, buttercups, straws, assorted waffles, candy canes, candy beads, ribbon candy, broken mix, rock cut mix and barber poles, made from mint stick candy, from 1 lb. to 50 lbs. to a stick.

Make chocolate Santa Claus in chocolate molds from solid chocolate, the same as for making Easter specialties.

POINTERS ON CANDY SCRAP

HOW TO USE UP THE DIFFERENT KINDS OF CANDY SCRAPS

There seems to be a lack of knowledge with most of the

candy makers how to use up their candy scrap that accumulates in a work shop or factory, which comes from the handling and making different specialties. The different kinds of candy scrap should never be left to lay around and accumulate in a work shop or candy factory, as candy is a perishable article, and should be used up from day to day in making the different specialties, so that it does not have time to decompose. Now in reference to the different kinds of candy scrap, first is to keep all the different kinds of candy separated, in trays or bins, enclosed in a cupboard, so that all the candy scrap is kept thoroughly free from dirt or dust.

In classifying the different kinds of candy scrap they should be divided into the following classes, as hard goods, candy scrap, cream center scrap, chocolate scrap, caramel scrap, gum scrap, marshmallow scrap, peanut scrap, cocoanut scrap, chewing gum scrap, scrapping from the revolving pans and scraps that contain citric acid.

HARD CANDY SCRAP MADE INTO THE FOLLOWING SPECIALTIES

Peanut brittle made with stick candy scrap. Wash the stick candy so that it does not contain any flour. Place in a copper kettle and cook on the open fire 8 lbs. of sugar, 4½ lbs. of corn syrup, 3 lbs. of stick candy scrap, one-half gallon of water. Cook to 245 degrees, then add 6 lbs. of Spanish peanuts and cook the batch until the peanuts are roasted a light brown color, then pour out on a greased slab, then add 2 ounces of soda and 1 ounce of salt, then fold up thoroughly while hot, so that the soda is thoroughly worked through the batch, then stretch out as for peanut brittle.

Burnt sugar color. Place 15 lbs. of stick candy scrap in a copper kettle with 1 gallon of water. Cook the same as for burnt sugar color, or until the batch is cooked black, then thin down with hot water, then cook to 224 degrees. This color can be used for coloring anything that burnt sugar

color is used for, but must not be sold on the market for pure sugar color.

Horehound stick, the old-fashioned kind. Wash the stick candy scrap, then place 5 lbs. in a copper kettle with 1 gallon of water and cook until dissolved, then add 4 lbs. of corn syrup, 25 lbs. of sugar, with 1 quart of horehound tea. Then cook to 308 degrees. Then pour out on a greased slab with rods, then dust the top of the batch with flour, then cut with horehound stick cutter.

Cream center scrap from the chocolate centers. Place 20 lbs. of maple sugar in your steam kettle with 3 gallons of water. Then cook until the maple sugar is dissolved, then add 80 lbs. of cream scrap that has been washed so that the cream scrap does not contain too much corn starch, then add 1 gallon of water and cook the batch to 238 degrees. Then pour out on a ball cream beater, and when partly cool start to cream to a fondant. Then it is ready to be used in the manufacture of maple cream chocolate center for pail goods.

Place the fondant cream in the melting kettle, then heat the fondant so that it is thin enough to cast, then add 12 lbs. of special fondant and mix thoroughly, then add enough burnt sugar color to give the cream a light maple color, then flavor with 2 ounces of maple flavor, then cast in starch with depositor, or 5-spout runner. Let stand in starch over night, then dip on the enrober dipping machine in thin chocolate.

CHOCOLATE DIPPED CARAMELS

Assorted chocolate scrap from the chocolate room. Place 15 lbs. of chocolate scrap in a copper kettle, then add 1 gallon of water and cook until the scrap is thoroughly dissolved, then strain through a fine sieve. Then place the dissolved strained scrap in a caramel stirring kettle with 12 lbs. of corn syrup and 14 lbs. of condensed milk, 1½ lbs. of

Nuco butter, 1 lb. of flour, if cooking by steam kettle. Then cook the batch to a stiff ball when tried in cold water, then add 2 ounces of vanilla flavor and 1 ounce of salt, then pour out on a greased slab dusted with flour. When cold cut by caramel machine and dip in chocolate.

WRAPPED OR CHOCOLATE DIPPED CARAMELS

Assorted caramel scrap. Place 25 lbs. of caramel scrap in a copper kettle, with 1 gallon of water. Then cook until thoroughly dissolved, then place in caramel steam jacket stirring kettle, then add 5 lbs. of corn syrup, 10 lbs. of condensed milk, 1 lb. of flour, 1 lb. of Nuco butter. Cook to a soft ball, then add 2 lbs. of cocoa powder and cook the batch to a stiff ball when tried in cold water. Then add 2 ounces of vanilla flavor and 1 ounce of salt. Then pour out on a greased slab that is dusted with flour, when cold cut in caramels and wrap by wrapping machine, or dip in chocolate on the enrober dipping machine.

GUM SCRAP FROM THE STARCH ROOM

Sanded A. B. Gums. Wash 10 lbs. of gum scrap in 1 gallon of water, then place the washed gum scrap in a gum cooking kettle with 3 gallons of water, then cook the scrap until the gum scrap is thoroughly dissolved, then add 50 lbs. of corn syrup, 10 lbs. of sugar. Then dissolve in a copper kettle 6½ lbs. of pearl starch in 5 gallons of water with one-half ounce of citric acid, then pour this starch water in your batch of gum that is cooking and cook the batch until the gum drops in a thin sheet from a paddle or palette knife, then add velvetine color and color the batch a black color. Then add 2 ounces of oil of anise flavor. Then cast in warm starch, the same as for other gum work. You can use this gum center without coloring the batch with velvetine black in different flavors, then run the centers up in the revolving pans for grocery mix candy.

MARSHMALLOW SCRAP

Marshmallow scrap should only be used for chocolate dipped caramels, and use 3 lbs. of assorted marshmallow scrap to 15 lb. batch of chocolate scrap when making caramels for chocolate dipping.

PEANUT SCRAP FROM CUTTING BARS OR SQUARES

Place 6 lbs. of sugar, 4 lbs. of corn syrup with 1½ quarts of water in a copper kettle, then cook the batch to 245 degrees, then add 7 lbs. of Spanish No. 1 peanuts and cook the peanuts until the peanuts are roasted a very light brown color. Then add 3 lbs. of peanut scrap and cook with a slow fire until the peanut scrap is melted, then pour out on a greased slab and finish the same as for peanut bar. When making blanched peanut bar, add the scrap when the batch is cooked to 260 degrees, then add the roasted blanched peanuts, and only mix the blanched peanuts through the syrup, then pour out on the greased slab. The peanut scrap can be ground through a food chopper, then cook the syrup to 290 degrees, then add the ground peanut scrap, and only mix through the batch, then finish the same as for peanut brittle, by adding soda on the slab.

COCOANUT SCRAP ASSORTED

Place 15 lbs. of assorted cocoanut scrap in the caramel stirring kettde, then add 5 lbs. of corn syrup, with 1 gallon of water and 1 lb. of Nuco butter, then cook to a soft ball when tried in cold water, then add 6 lbs. of ground figs and cook through the batch, then all 11 lbs. of fine cocoanut, then flavor with 2 ounces of vanilla flavor, then pour out on a greased slab that is dusted with flour, then roll down to one-half inch thick, then cut in caramels or oblong shape and dip in chocolate.

When making cocoanut squares for sanded, the scrap

from each color can be used in the next batch of the same color.

CHEWING GUM SCRAP

As there is a good deal of scrap from the cutting in stick gum it can be used up in each batch as long as you keep the different flavors separated, then add the stick gum scrap before you add the powder sugar in the gum cooker and mixing kettle.

SCRAPPING FROM THE REVOLVING PANS

This scrap can be cooked up into a syrup and used in running up jaw breakers for the engrossing syrup, but must never be used for the finishing syrup.

CANDY SCRAP THAT CONTAINS CITRIC ACID

Lemon drops, fruit tables and cherry drops contain citric acid. This scrap should never be used in hard boil goods, as it will cause the goods to be very sticky and runny like.

Candy scrap that contains acid can be used in cocoanut work, dipped in chocolate, caramel work dipped in chocolate, and when using steam stirring kettle use 1 lb. of flour to every 20-lb. batch, and do not use over 2 to 3 lbs. of acid scrap to every 20 lbs. of assorted chocolate scrap.

Acid scrap should never be used in making a cream center fondant. Acid scrap should never be used on peanut-work, as the goods will get very sticky.

Acid scrap from jelly work should never be used in making a batch of jelly, as the acid destroys the setting of the Jap gelatine.

SYSTEM IN A CANDY FACTORY

Sanitation is the first thing that the manager of a candy factory or work shop should stop to consider, if the expects to make a success in the candy business.

In operating a candy factory or work shop it should al-

ways be kept in a sanitary condition. The walls and ceiling of the candy factory or work shop should be painted white, and at least every Saturday all the floors and tables and machines should be scrubbed.

The chocolate dipping rooms should have plenty of ventilation and light, and be kept at a temperature in the warm weather of 66 to 68 degrees for hand-dipped work, and for the enrober dipped goods 65 to 67 degrees, so that when the goods are taken from the conveyor and placed on the racks the chocolate dipped goods will cool quickly, for when the chocolate coated goods dry slowly the chocolate coated goods will streak or turn gray.

In operating the enrober chocolate dipping machine, the chocolate should be taken from the machine every night when you are through dipping, so that the chocolate will not set too hard in the machine by next morning; for if you leave the chocolate in the machine, it will take a long time to melt the chocolate before you can start the machine.

The enrober chocolate dipping machine should be kept well oiled and clean. In installing the enrober dipping machine the dipping machine should be placed next or outside of the chocolate cooling room, with an opening in the wall just large enough for the conveyor that extends into the cooling room. You should have two girls feed the conveyor with centers before they pass through the chocolate on the dipping machine. In putting on nut tops run the machine on slow speed and have two girls place the nuts on top of the dipped chocolate centers as soon as they come through the machine. You should have from 3 to 5 board racks to place the chocolates that are on the trays when they come from the machine into the cooling room. As these racks are on rollers, they can be moved to any part of the room, where the chocolates can be packed.

The cooling room, where the hand dipped goods are made, should at all times be kept clean, and in the wholesale

houses you should have girls keep the dippers supplied with centers and for taking away the dipped goods. All centers should be kept in trays on a table, and each kind of center in its place.

Your tables for packing fancy box goods should be lined up so that they have an aisle between each row of tables. Then have the boxes lined up, each kind on a separate table. Then line the boxes with liners and pack with chocolates.

The cooling room for storing chocolate box goods should be kept at 70 degrees, for when you keep the chocolate storage room too cold during the warm weather months your chocolates will sweat when they come out in the warm atmosphere.

The cream department should be kept clean and should be well ventilated, and the room should be kept free from steam by having a hood over each cooking kettle, with a suction fan with a pipe system to take away the steam from the cooking kettles.

The depositor should be kept clean from candy, and always steam the pump on machine after each batch with a steam hose so that the pumps will not have any hard sugar sticking in the pumps, as you are liable to break the pumps when starting the machine. Always keep the wire strainer on the hopper of the machine so as to catch any small nail that should come from opening the sugar barrels, as when the nails get down in one of the pumps it will break the pump.

Before you are ready to pour in the batch in the hopper of the machine, turn on the steam and heat the machine to 160 degrees for cream work, 180 degrees for gum work. When the trays are filled from the depositor you should have the automatic lifting truck to truck the trays away from the machine, either in the drying room or to any part of the room.

When running the starch boards through the starch buck

machine, to clean the centers from starch, for soft chocolate cream centers, take and raise the top brush on the machine, so that the top brush will not rub down too hard on the centers when brushing them. For cream mix or gum work lower the brush down so that the brush will clean the starch well from the centers, and always see that the brushes are kept free from starch underneath the sieve, as they fill up with siftings from the candy.

Your cooking kettles should always be installed near the depositor machine.

The gum work and jelly work should always be kept separated from the cream work. In a wholesale house you should have one depositor for cream work and one depositor for gum work. All the gum cooking kettles should have a hood over the cooking kettle with a pipe system with a suction fan to take away the steam,. so that the starch will keep dry.

Marshmallow work should not be made where you do a lot of gum or fondant work, on account of the steam, as the starch must be thoroughly dry and warm to make a success in marshmallow work.

Icing and dipping room. The tables should be lined with heavy tin, as you don't need any tanks or kettles for dipping icing work. As the icing is made the girl should carry the icing in a pail to the girls at the table. To keep the icing dipped goods from leaking, give them a wetting with crystal syrup and powder sugar before the centers are dipped in icing..

The crystalizing department should be in charge of one man in a wholesale factory to cook the crystal and see that the pans are kept clean, and the tank which contains the crystal syrup. The crystal room should be kept warm in the cold weather, as the crystal will take better on the goods if the room is warm than it will in a cold room, as crystallized goods will not dry right when the room is cold and

your crystallized goods will look dull.

The caramel department should be kept clean and the candy should always be kept from the floor. The caramel cutting machines should be kept in rows with an aisle between each machine, and place the sizing in front of the caramel cutters, and have the cold water slabs in rows with an aisle between each slab, so that you can work on either side of the slab. Have the cooking kettles in one part of the room and have them lined up in a row, and never place the cooking kettles up too close to the wall, so that you cannot get back of the kettles to keep them clean.

For the wrapping machine, first size down the caramel goods, then take and run the caramel piece through the caramel cutter in long strips about 2 feet long, then have a boy to feed the strips into the caramel wrapping machine. Then have two girls to pack them in pails, as one girl misses too many, and then they must be packed by other girls.

Cold storage room. Every wholesale candy factory should have a cold room to keep all the nuts of different kinds in; also the fruits, condensed milk and flavors of all kinds.

Supply room. Every wholesale factory should have a supply room for storing the different supplies, and this room should have one person to look after the stock in giving it out and receiving the goods.

You should have one room for storing your supply of fancy box goods so that they do not get dusty and broken, as they do when stacked in all parts of the factory.

Sample room. Every wholesale confectioner should have a sample room to make a display of his high grade fancy package goods, which should be kept in show cases, so that the dust will not settle on the box goods, and they should be there to look at, not to be handled by everybody, and as soon as they show signs of looking dull they should be replaced with new ones.

The sample cases for the road men, each tray should have a glass top to each tray in displaying his samples, as the glass top will keep his samples clean, and will keep his customers from sampling everything that is in the tray. Hard goods, when displayed in open trays get sticky or lose their gloss in a short time. The salesmen should see that their samples are always fresh made, and all old samples replaced with new ones whenever they come in to the house, or if out on the road for a month at a time their stock of samples should be sent to them to be replaced.

CONCLUSION

In offering this Up-to-Date Candy Teacher to the confectioners and candy makers, I am confident that with careful attention in following my instructions on the different specialties made for the wholesale and retail trade, you will be capable of producing a complete line of up-to-date wholesale and retail specialties, and I consider that I am serving a very useful purpose by giving the confectioners and the candy makers the fullest possible details in reference to the manufacture of all the different specialties made by the very latest methods used today.

Yours truly,

CHARLES H. APELL,

Author of the 20th Century and the Up-to-Date Candy Teachers.

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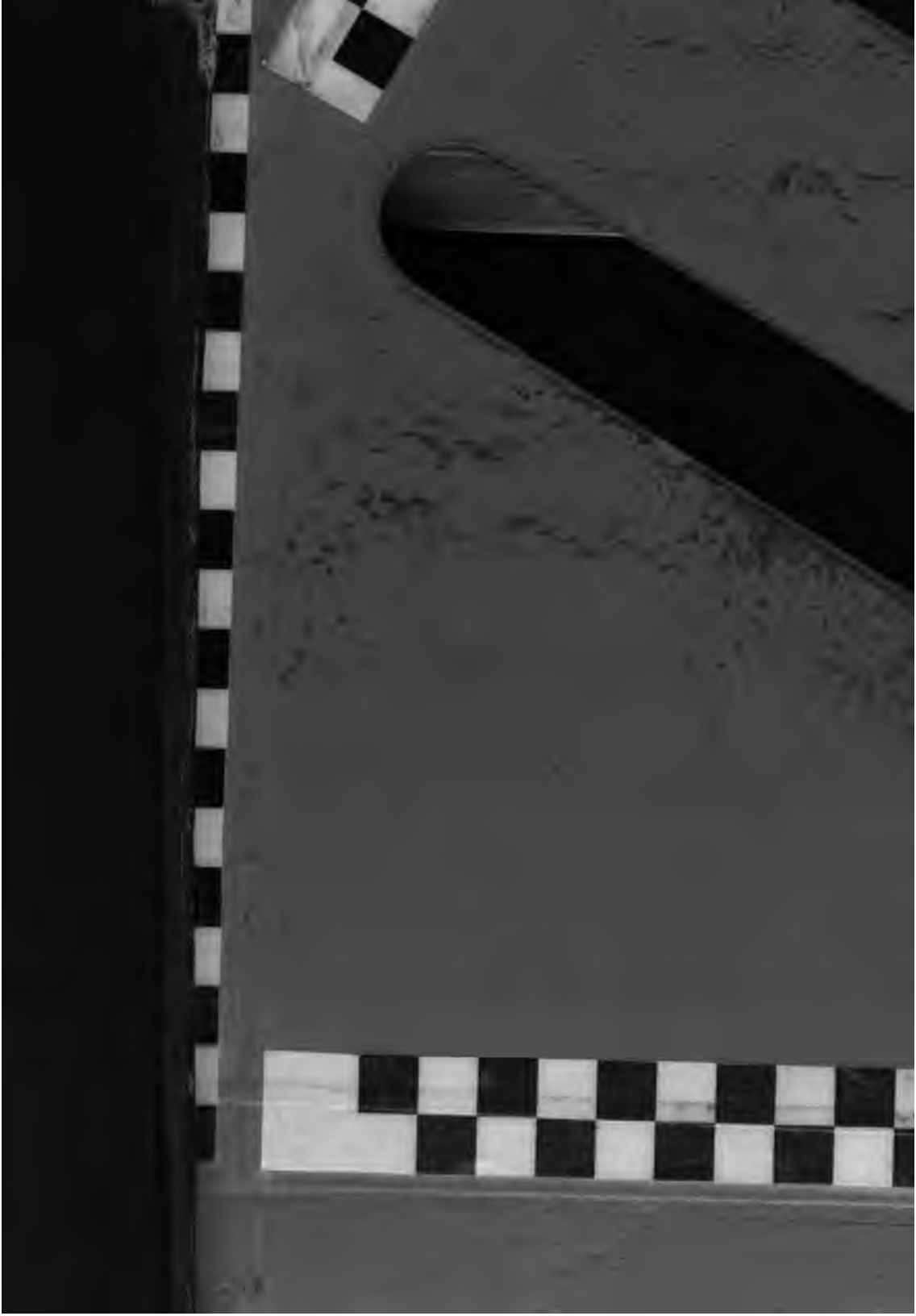
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